

QUINCY

COMPACT, LOW COST LAB INCUBATOR

Custom developed for laboratories that need a dependable, compact incubator for cultures, test kits, eggs and biologicals



6128S02

- Ideal for clinical, industrial and school laboratories; for physicians' offices and as a general-purpose warming cabinet
- See-through acrylic door that enables the user to see the entire work space without opening the door
- Temperature up to 62°C and 65°C; sensitive heat controller maintains temperatures to $\pm 1/2^\circ\text{C}$
- Beakers, flasks, petri dishes and test tubes can be processed at the same time
- Two sizes: 0.7 and 2.0 cubic foot capacities

For additional specifications refer to the selection chart. Exterior is attractive ivory baked-on enamel. Chrome-plated, adjustable shelf and fixed-bottom shelf are provided. Additional shelves are available. Includes laboratory thermometer.

COMPACT LAB INCUBATORS

THOMAS NO.	DIMENSIONS (W x D x H)		POWER	TEMP.	PRICE
	INTERIOR	EXTERIOR			
6128S02	12" x 10" x 10"	12 1/2" x 10 1/2" x 15"	120 VAC 90 W	To 62°C	\$298.00
6128S05	18" x 12" x 15"	18" x 12" x 21"	115 VAC 200 W	To 65°C	492.00

BOEKEL

ECONOMICAL DIGITAL INCUBATOR



6128T30

- Digital temperature display with a 0.1°C resolution; maximum temperature 60°C
- Rugged metal door and magnetic door latch
- Excellent temperature stability and uniformity
- Smaller than similar capacity incubators, making it ideal for limited spaces
- Additional shelves available

Supplied with stainless steel bottom shelf plus one adjustable shelf. Overall dimensions: 13" W x 14" D x 16 1/2" H. Shelf storage area: 1.7 sq. ft.; number of shelves supplied is 2. Chamber dimensions: 11 1/2" W x 12" D x 10 1/2" H. Weighs 19 lbs. For 120 VAC, 90 Watts. See selection chart for additional specifications.

6128T30	INCUBATOR, Model 13300	5498.00
6128T32	SHLF, 11 1/2" x 10 1/2"	48.00

Since 1900



Thomas Scientific (Arthur H. Thomas Co.) has been the one source for quality products and dependable service to the worldwide scientific community.

BOEKEL

DIGITAL INCUBATORS

Microprocessor controlled digital temperature selector along with an independent safety thermostat



6128750

- Temperature range of ambient plus 5°C to 60°C
- Equipped with a gasket sealed metal and acrylic plastic see-through door
- "Press to set" digital display

Gray and burgundy exterior is constructed of cold rolled steel; corrosion-resistant aluminum interior provides good heat transfer. Bottom shelf, plus two adjustable shelves are removable for easy cleaning. Supplied with 3-wire cord (8 feet length) and molded plug. Overall dimensions: 13" W x 14" D x 16 1/2" H; chamber dimensions: 11 1/2" W x 12" D x 10 1/2" H. Supplied with two shelves; shelf storage area: 2.5 sq. ft. Power requirements: 115 V or 230 V; 90 W. Shipping weight: 24 lbs.

6128750 INCUBATOR, 115 V, 50/60 Hz \$255.46

6128755 INCUBATOR, 230 V, 50/60 Hz 903.54

BOEKEL/GRANT

ORBITAL RECIPROCATING INCUBATOR/SHAKER

Combines linear and orbital shaking motions with excellent temperature control

- Stainless steel tank
- Adjustable speed, stroke and motion
- Quiet operation

Switch from one motion to another by simply changing the orientation of the tray. Shaker is designed to provide the working area for a large number of vessels while retaining a minimal footprint. Temperature and shaking speed are digitally set for reproducibility of process. Recessed control panel protects controls from spillage and accidental alteration. Unit is designed to be placed "end-on" for efficient utilization of bench space.



6128U01

The stainless steel tank is in an outer case with heater and temperature sensors mounted underneath. The shaker trolley is operated by a magnetically coupled driver. Drain allows easy emptying of tank. All immersed parts are made of corrosion resistant materials and are removable for easy cleaning. Operating instructions are printed on the outer case for permanent reference. Unit has adjustable overtemperature cut-off.

Dimensions: overall: 21.9" L x 12.8" W x 11.8" D (55.5 x 32.5 x 30 cm); tank: 19.9" L x 11.8" W x 7.9" D (50.5 x 30 x 20 cm); weight: 33 lbs. (15 kg).

SPECIFICATIONS

Temperature Range:	0° to 99°C (with optional immersion coil, Thomas number 6128U11)
Stability (OIH 5896):	±0.1°C
Uniformity:	±0.1°C
Temperature Setting/Display:	Digital/LED
Display Resolution:	0.1°C
Shaking Speed Range:	20 to 200 rpm (Orbital) / 40 to 360 strokes/min (Reciprocating)
Linear - Stroke Length:	18, 28, 36 mm
Orbital - Radius:	9 mm
Shaking Speed Setting/Display:	Digital/LED
Display Resolution:	1 rpm
Heater Power:	1.4 kW
Overall Consumption:	1.5 kW
Shaking Tray Area:	14.8" x 9.2" (37.5 x 23.5 cm)

6128U01 ORBITAL RECIPROCATING SHAKER \$2,380.00

PRECISION SCIENTIFIC

AUTOMATIC CO₂ WATER-JACKETED INCUBATORS

Napco® 5400 Series



6136S06



6126S17

- For cell biology, genetics, virology, cancer research, pharmacology, organ culture, tissue cross matching and other sophisticated culturing disciplines
- Single and dual chambers
- Stainless steel chamber
- Simplified controller provides easy operation
- Available with infrared sensor
- Multiple heater system provides unprecedented temperature uniformity
- Positive set-point, digital temperature and CO₂ controls simple to set and read
- Two-year limited warranty

Crevice free corners and removable shelves, shelf supports, blower duct and fan blade for thorough cleaning and sanitizing. Triple-wall modular water jacket allows rapid heating of chamber, minimizes thermal loss to environment, increases energy efficiency (ten year water jacket warranty). Air heater inside the chamber provides quick recovery from temperature loss due to door opening. Exterior door heater reduces condensation on inner glass door, maximizing chamber visibility. Temperature sensor positioned inside the incubating chamber displays actual temperature and provides safety interrupt at high limit. Infrared sensor is ideal for applications where temperature and humidity levels frequently change. Chamber fan provides maximum uniformity of temperature, CO₂ and RH with minimum air-flow. Temperature range: ambient +5° to 50°C; temperature stability ±0.1°C and uniformity ±0.25°C; CO₂ range 0 to 20%, control 0.1%, stability ±0.1% and uniformity ±0.25%; humidity range above ambient to 98% relative humidity.

Incubators incorporate a variety of safety features. Alarm system software continually monitors all control and operational functions. Audio and visual alarms signal temperature and CO₂ deviations. A visual indicator alerts user of low water level. A built-in 0.22 µm HEPA filter on the CO₂ supply inlet prevents particulates and other potentially harmful contaminants from entering chamber through CO₂ supply lines and cylinders.

NAPCO 5400 SERIES INCUBATORS

THOMAS NO.	INFRARED SENSOR	CHAMBER VOLUME (cu. ft.)	NO. OF CHAMBERS	CHAMBER DIMENSIONS W x D x H (in.)	EXTERIOR DIMENSIONS W x D x H (in.)	*SHELF CAPACITY (sq. ft.)	ELECTRICAL SERVICE	SHIP WT (lbs.)	PRICE
6136S06	No	5.4	1	17.5 x 17.3 x 25	24.5 x 27 x 33.7	10	115 V, 475 W, 4.0 amps	255	\$4,322.00
6136S08	No	5.4	1	17.5 x 17.3 x 25	24.5 x 27 x 33.7	10	230 V, 475 W, 2.0 amps	255	4,884.00
6136S11	Yes	5.4	1	17.5 x 17.3 x 25	24.5 x 27 x 33.7	10	115 V, 475 W, 4.0 amps	255	5,296.00
6136S13	Yes	5.4	1	17.5 x 17.3 x 25	24.5 x 27 x 33.7	10	230 V, 475 W, 2.0 amps	255	5,983.00
6136S17	No	10.8	2	17.5 x 17.3 x 25	24.5 x 27 x 67	20	115 V, 950 W, 8.0 amps	490	8,644.00
6136S19	No	10.8	2	17.5 x 17.3 x 25	24.5 x 27 x 67	20	230 V, 950 W, 4.0 amps	490	9,775.00
6136S21	Yes	10.8	2	17.5 x 17.3 x 25	24.5 x 27 x 67	20	115 V, 950 W, 8.0 amps	490	10,502.00
6136S23	Yes	10.8	2	17.5 x 17.3 x 25	24.5 x 27 x 67	20	230 V, 950 W, 4.0 amps	490	11,982.00

* Shelves provided - 5 per chamber (maximum 10 per chamber).

PRECISION SCIENTIFIC

WATER-JACKETED CO₂ INCUBATORS

Napco® 6001 Series

- Provide optimum growth conditions and higher cell yields
- Unique, patented temperature recovery system
- Simple to program microprocessor controller for temperature and CO₂
- Pro-rated ten year warranty on water jacket

Unique air heater provides quick recovery from temperature loss following door openings, minimizing thermal shock and increasing yield. Powerful, self-diagnostic microprocessor controller displays and sets temperature and CO₂ to 0.1°C and 0.1%. Thermal conductivity sensor monitors CO₂. Easy to use pushbutton set controls. Visual and audible alarms warn you of any variance from set point conditions. In-line HEPA filter protects against contamination of culture samples.

Triple wall construction, for rapid heating of chamber to reduce thermal loss and increase efficiency. An outer door heater lessens condensation on the glass inner door. A battery back-up prevents data loss in the event of a power outage; password lockout protection inhibits unauthorized or accidental changes to control parameters. A gas shuttle switch in the CO₂ line guards against any disruption in the gas supply. High limit safety switch cuts heater power when temperature exceeds preset limits. Rear access port enables sampling, operation of a small apparatus within the chamber and access to the electrical outlet. Interior is stainless steel and readily disassembles for cleaning.

Single-chamber units are stackable with other single-chamber Napco models. Chambers are equipped with five shelves and accommodate ten. A humidity pan is included for each chamber. Supplied with left hinged door but available on special order with right hinged door for side-by-side mounting. Relative humidity display and infrared CO₂ sensor are also available on special order.



6136S26



6136S47

NAPCO 6001 SERIES INCUBATORS

THOMAS NO.	NO. OF CHAMBERS	TOTAL CHAMBER VOLUME	CHAMBER DIMENSIONS (W x D x H)	EXTERIOR DIMENSIONS (W x D x H)	ELECTRICAL REQUIREMENTS	PRICE
6136S26	1	5.4 cu. ft. (153.5 L)	17.5 x 17.8 x 25 in. (445 x 452 x 635 mm)	24.5 x 29.0 x 30 in. (623 x 737 x 914 mm)	115 VAC, 50/60 Hz	\$4,913.00
6136S30	1	5.4 cu. ft. (153.5 L)	17.5 x 17.8 x 25 in. (445 x 452 x 635 mm)	24.5 x 29.0 x 30 in. (623 x 737 x 914 mm)	230 VAC, 50/60 Hz	5,405.00
6136S47	2	10.8 cu. ft. (307 L)	17.5 x 17.8 x 25 in. (445 x 452 x 635 mm) each chamber	24.5 x 29 x 71.5 in. (6237 x 737 x 1,816 mm)	120 VAC, 60 Hz	9,026.00
6136S49	2	5.4 cu. ft. (153.5 L)	17.5 x 17.8 x 25 in. (445 x 452 x 635 mm) each chamber	24.5 x 29 x 71.5 in. (6237 x 737 x 1,816 mm)	230 VAC, 50 Hz	10,990.00



Thomas Tips

Gas Cylinder Storage and Handling

The Compressed Gas Association (CGA) promotes safe practices when working with industrial gases such as carbon dioxide. Regular maintenance checks of your gas cylinders will ensure the safety of your work and workers. This includes:

- Visually inspecting for defects, such as leaking regulators and cylinder valves
- Securing cylinders with straps or chains connected to a wall bracket or other fixed surface
- Closing cylinder valves when not in use
- Using appropriate lifting devices for transport

For more information, visit www.cganet.com.

PRECISION SCIENTIFIC

AUTOMATIC CO₂ WATER-JACKETED INCUBATORS

Napco® 6500 Series



6136S65

- Fully autoclavable
- Three-digit LED display
- Conductivity or infrared sensors

These digital incubators are equipped with an extra-large 20 gallon water jacket and feature an easily removable shelf system that is fully autoclavable. There are no sensors, fans or ducts in the chamber. There are no crevices, areas hidden behind shelf supports or fan chambers to shelter and hide bacteria. These unique features help to provide a "clean chamber" for ease of decontamination.

Available with thermal conductivity or infrared sensors. The sensors are contained in a compartment in the water jacket which provides a stable environment for the most accurate temperature and CO₂ measurement and control. Microprocessor controlled with set point control lock.

Humidity range: ambient to 98%; chamber dimensions: 5.5 cu. Ft./156.3 L.

SPECIFICATIONS

Temperature Control:	PID (Proportional Integral Derivative)
Temperature Range:	18°C to 50°C
Temperature Uniformity:	±0.3°C
CO ₂ Control:	0.1%
CO ₂ Range:	0 to 20%
CO ₂ Uniformity:	±0.25%

6136S65 INCUBATOR, CO₂, Water-Jacketed Thermal Conductivity \$4,500.00

6136S70 INCUBATOR, CO₂, Water-Jacketed Infrared 5,390.00

REVCO

CO₂ INCUBATORS

Multi-functional, superior quality for simplified operation and monitoring



6136T01

• IntriLogic™ microprocessor control

• Single or dual chamber cabinets

• Infrared or thermal conductivity control

Gentle air flow maintains desired environment for optimum cell culture. The IntriLogic control system monitors and displays all incubator systems. Safe-and-easy operation, bright, easy-to-read LCD displays the function pads, touch pad data entry and indicator lights. Temperature control 5°C above ambient to +60°C, relative humidity to 96% at 37°C chamber temperature. Independent probes for temperature control and display. Over temperature alarm is audible and visual upon deviation from set point. Audio and visual alarm upon 1% deviation above or below set point; manual initiated alarm mute. Alarm/monitor system is equipped with 3 alarms; over temp alarm, CO₂ alarm and remote alarm contacts, which are standard, located on the rear control panel. RS232 data port allows for data transport. Triple-wall structure insulated with structural foam insulation to enhance temperature control. Interior shelves and shelf supports are 100% polished stainless steel, removable for easy cleaning and decontamination. Glass inner door with latch shelves are ultra flat. Leveling bases are identical on single and dual chamber models.

Ultima models feature deep drawn seamless interiors with cove corners for easier cleaning. Include 5 shelves. Available with seamless stainless steel or copper bonded interiors. Copper creates natural fungicides to inhibit the growth of molds, spores, yeast and fungi.

Elite models have conventional welded stainless steel interiors with non-porous filled seams to resist hidden contaminants. Include 4 shelves.

Ultima Incubators, Stainless Steel Interiors

6136T01	INCUBATOR, CO ₂ , Infrared, Single, 115 V	\$6,719.00
6136T03	INCUBATOR, CO ₂ , Infrared, Single, 220 V	5,587.00
6136T05	INCUBATOR, CO ₂ , Infrared, Dual, 115 V	12,914.00
6136T07	INCUBATOR, CO ₂ , Infrared, Dual, 220 V	12,661.00
6136T08	INCUBATOR, CO ₂ , Thermal Conductivity, Single, 115 V	5,585.00
6136T11	INCUBATOR, CO ₂ , Thermal Conductivity, Single, 220 V	5,905.00
6136T13	INCUBATOR, CO ₂ , Thermal Conductivity, Dual, 115 V	10,646.00
6136T15	INCUBATOR, CO ₂ , Thermal Conductivity, Dual, 220 V	13,317.00

Ultima Incubators, Copper Bonded Interiors

6136T17	INCUBATOR, CO ₂ , Infrared, Single, 115 V	CALL
6136T19	INCUBATOR, CO ₂ , Infrared, Single, 220 V	\$6,587.00
6136T21	INCUBATOR, CO ₂ , Infrared, Dual, 115 V	CALL
6136T23	INCUBATOR, CO ₂ , Infrared, Dual, 220 V	13,517.00
6136T25	INCUBATOR, CO ₂ , Thermal Conductivity, Single, 115 V	CALL
6136T27	INCUBATOR, CO ₂ , Thermal Conductivity, Single, 220 V	5,905.00
6136T29	INCUBATOR, CO ₂ , Thermal Conductivity, Dual, 115 V	CALL
6136T31	INCUBATOR, CO ₂ , Thermal Conductivity, Dual, 220 V	13,517.00

Elite Incubators, Welded Stainless Steel Interiors

6136T33	INCUBATOR, CO ₂ , Infrared, Single, 115 V	\$5,470.00
6136T35	INCUBATOR, CO ₂ , Infrared, Single, 220 V	5,589.00
6136T37	INCUBATOR, CO ₂ , Infrared, Dual, 115 V	11,346.00
6136T39	INCUBATOR, CO ₂ , Infrared, Dual, 220 V	10,907.00
6136T41	INCUBATOR, CO ₂ , Thermal Conductivity, Single, 115 V	4,603.00
6136T43	INCUBATOR, CO ₂ , Thermal Conductivity, Single, 220 V	4,450.00
6136T45	INCUBATOR, CO ₂ , Thermal Conductivity, Dual, 115 V	8,975.00
6136T47	INCUBATOR, CO ₂ , Thermal Conductivity, Dual, 220 V	8,726.00

CEDCO

CO₂ INCUBATORS

Designed for your enhanced performance and reliability

- Quick removable interior
- CO₂ tank empty/sensor/alarms
- Built-in tank-tender cylinder switch

The Advanced SERIES™ incubators achieves precise temperature and CO₂ control regardless of how the chamber is loaded. Humidification is achieved through natural evaporation and RH% is displayed digitally to a resolution of 1.0%. The large easy to read LCD displays temperature, CO₂, and pH. The incubator is equipped with triple wall construction, an extra large water jacket

surrounding five sides of the chamber. The effects of condensation and contamination is virtually eliminated in part to the exceptional temperature uniformity. A parallel printer port and RS 232 serial port allow for the exportation of data from the incubator to any IBM compatible printer. The ports also allow for remote monitoring of temperature and CO₂ alarm conditions.

1510 and 1610 Series

Water jacketed incubators use thermal conductivity, detector technology and provide reliable automatic detection and control of CO₂. The thermal conductivity sensor is ideally suited to longer term studies where the chamber door is opened less frequently. The sensor is affected by changes in RH and temperature.

6136756	INCUBATOR, CO ₂ , 1510 series, Water-Jacketed, 6.7" H	\$5,390.00
6136759	INCUBATOR, CO ₂ , 1510 series, Water-Jacketed, Dual Chamber	10,660.00
6136762	INCUBATOR, CO ₂ , 1610 series, Water-Jacketed, 6.7" H	3,700.00
6136765	INCUBATOR, CO ₂ , 1610 series, Water-Jacketed, Dual Chamber	7,445.00

1710 and 2110 Series

Water jacketed CO₂ incubators use an infrared control sensor capable of sensing a change in CO₂ concentration as small as 0.1%. Infrared sensors are unaffected by changes in temperature and humidity. This makes the 2110 series ideally suited for applications where the incubator door is being opened on a frequent basis.

6136758	INCUBATOR, CO ₂ , 1710 series, Water-Jacketed, 6.7" H	36,100.00
6136753	INCUBATOR, CO ₂ , 1710 series, Water-Jacketed, Dual Chamber	12,940.00
6136768	INCUBATOR, CO ₂ , 2110 series, Water-Jacketed, 6.7" H	4,780.00
6136771	INCUBATOR, CO ₂ , 2110 series, Water-Jacketed, Dual Chamber	9,515.00



6136750

CO₂ SWITCHING UNIT

For maintaining supply of CO₂ gas to incubator

- With on/off switch and pilot light
- Panel has 1/4" compression fittings on the two inlets and on outlet
- Inlet pressure: 12-14 psi

Automatically switches gas flow from depleted CO₂ cylinder to a second cylinder when pressure reaches 6 psi (40 kPa). If depleted cylinder is then replaced, unit will automatically switch gas flow back again when second cylinder is depleted. Pilot light indicates which cylinder is in use; alarm sounds if both cylinders are depleted.

Housing is of silicon-coated steel, overall 203 x 178 x 76 mm high. With 3-wire cord and plug for 120 volts, 60 Hz; 2 amperes. CO₂ cylinders are not supplied.

6138F62	CO ₂ SWITCHING UNIT	9960.00
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6138F62

THERMOLYNE

CULTURE INCUBATORS

Simple to use

- Uses minimum space, yet provides excellent incubation results
- Unloaded uniformity of $\pm 0.4^{\circ}\text{C}$ at 30°C
- Operating range is adjustable from 30°C to 65°C
- Heating element is located on back wall, which allows petri dishes to be placed directly on the bottom without overheating; load capacity is 132 - 60 x 15 petri dishes (chamber measures 10" x 8" x 6 1/2" high)
- Aluminum-lined chamber contains a removable floor and middle shelf

Partial immersion thermometer is supplied, which can be inserted through a port in the top of the incubator for temperature monitoring; for replacement thermometer, use 9286C16. Supplied complete with three-wire cord and plug for 120 V, 50/60 Hz, 50 watts.

6140B20	INCUBATOR	\$532.00
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6140B20

BRINKMANN

REFRIGERATED
INCUBATORS

6140823

These incubators combine the advantages of EvenTemp™ technology with a unique patented cooling system to achieve exact and constant temperature conditions between 0 and 99.9°C. Large surface plate evaporators integrated into the external walls of the preheating chamber cool the inner chamber atmosphere immediately, providing better temperature uniformity and sensitivity. Features include: microprocessor-controlled heating and cooling—achieves resolution of 0.1°C; adjustable-speed fan directs and controls air conduction—maintains temperature in fully loaded chamber, speeds recovery of temperature after opening doors; LED display and temperature setting—allows reliable reproduction of temperatures; CFC-free polyurethane foam—provides tight insulation against diffusion, and high humidity levels to help prevent sample from drying out.

6140823	INCUBATOR, 2.5 Cu Ft.	\$4,300.00
6140826	INCUBATOR, 4.5 Cu Ft.	5,000.00
6140829	INCUBATOR, 9.4 Cu Ft.	5,540.00

TORREY PINES

ECHOTHERM™ BENCH TOP
CHILLING/HEATING INCUBATORS

Maintain precise temperature control between 4.0 and 70°C



6140860

- Peltier based, with no compressors or CFC's
- Electronic calibration and power failure protection
- Watchdog circuit monitors the microprocessor
- RS232 interface
- 1 year warranty

Models IN30 and IN40 are not programmable. Units have a 5/8" LCD that reads temperature to 0.1°C. The display can be changed from temperature to timer with a single keystroke. The timer reads in hours, minutes and seconds. When the timer counts down to zero, it sounds an audible alarm. Timer is settable to 100 hours maximum. In addition, timers have a user-settable Auto Off, which turns the heater/chiller off at zero time. The keyboard is tactile touch with audible feedback and has UP arrow, DOWN arrow, TEMP, TIMER and AUTO-OFF keys.

Models IN35 and IN45 are fully programmable by user through the keyboard. The units can store three routines in memory for instant recall and use at any time. Each program has ten steps where each step is a temperature target, temperature ramp (if desired) and a run time. At the end of each step is a "cycle" step, which can be set to repeat one to nine times. The display is a two-line alphanumeric type with 16 characters per line. Display shows target temperature and actual temperature to 0.1°C, ramp rate in °C/hour and timer in day, hours, minutes and seconds to 99 days maximum.

All models have seamless, molded white ABS plastic chambers for easy cleaning. An inner and outer door are included with all units. The inner door is clear plastic for sample viewing while minimally upsetting the chamber temperature. Units have painted aluminum chassis with a plastic front panel and door. They come complete with a three-wire grounded, detachable AC line cord, racks and an instruction manual. The high and neutral lines are fused and switched for safety.

SPECIFICATIONS		IN30 / IN40	IN35 / IN45
TEMPERATURE	Range	4.0 to 70.0°C	4.0 to 70.0°C
	Repeatability	0.1°C	0.1°C
	Accuracy	±0.2%	±0.2%
	Stability	±0.1°C	±0.1°C
TIMER	Range	99 hours	99 days
	Repeatability	1 second	1 second
ELECTRICAL	Heater/chiller Power Consumption w/ switched and fused AC line cord	Peltier based, 10 watts 230 watts Yes, high and neutral Detachable 3-wire, 7-foot	Peltier based, 10 watts 230 watts Yes, high and neutral Detachable 3-wire, 7-foot
	DIMENSIONS	Overall H x W x D, inches Chamber H x W x D, inches	15.5 x 22.25 x 18.5 12 x 14 x 10	28.25 x 22.25 x 18.5 24 x 14 x 10
WEIGHT		49 lbs.	56 lbs.

6140860	IN30 CHILL INCUBATOR, Digital, 115 VAC, 50/60 Hz, 2.0 amp	2,675.00
6140862	IN35 CHILL INCUBATOR, Digital, 100 VAC, 50/60 Hz, 2.5 amp	2,675.00
6140864	IN30 CHILL INCUBATOR, Digital, 115 VAC, 50/60 Hz, 2.0 amp	2,675.00
6140866	GEN-001 REPLACEMENT RACK, Ea.	30.00
6140870	IN35 INCUBATOR, Programmable, 115 VAC, 50/60 Hz, 2.0 amp	2,475.00
6140873	IN35 INCUBATOR, Programmable, 115 VAC, 50/60 Hz, 2.0 amp	2,475.00
6140880	IN40 INCUBATOR, Digital, 230 VAC, 50/60 Hz, 2.0 amp	2,600.00
6140882	IN42 INCUBATOR, Digital, 230 VAC, 50/60 Hz, 2.0 amp	2,900.00
6140880	IN45 INCUBATOR, Programmable, 230 VAC, 50/60 Hz, 2.0 amp	3,300.00
6140882	IN42 INCUBATOR, Programmable, 230 VAC, 50/60 Hz, 2.0 amp	3,300.00

24-hour order
turnaround!

Thomas ships over 98% of domestic orders for in-stock items the same day we receive them. That's a record we are extremely proud of! On request, we can even assure overnight delivery of a customer's order via national and international carriers.

BRINKMANN

GROWTH CHAMBER

Microprocessor controlled heating and cooling for optimum temperature and accuracy



6140B69

- Strong regular illumination performance
- CFC-free polyurethane foam
- Programmable digital one week timer

Exact day and night stimulation allow homogeneous growth simulation. High performance fluorescent growth lamps located in the doors-shielded from the chamber by a glass pane- ensures optimal



6140B75

temperature conditions. An adjustable light density in combinations of 2, 4, 6, 8 and 10 lamps are automatically controlled by a programmable timer. Also available is a controlled 10 to 90% humidity growth chamber (6140B75). Two LED displays show set point and actual values alternatively. Equipped with a 2-channel microprocessor - control, humidity and dehumidify. Systems maintained to $\pm 0.1^{\circ}\text{C}$ or 1%RH to increase applications options.

6140B69	GROWTH CHAMBER, 8.4 Cubic Feet.....	\$3,005.00
6140B72	GROWTH CHAMBER, 38.3 Cubic Feet.....	13,035.00
6140B75	GROWTH CHAMBER, RH, 8.4 Cubic Feet.....	17,810.00

CERAMIC MARKING INK

For permanently marking laboratory porcelain and other ceramic ware

- Does not smear or spread; can be applied with a steel pen
- Safe to use; contains no hydrofluoric acid
- In wide-mouth bottles with leakproof screw cap

NOTE: it is recommended that ink be heat treated to at least 1000°C on glazed or glassy surfaces.



6150C10

6150C10	CERAMIC INK, 1.5 oz. Bt.....	\$23.35
6150C12	CERAMIC INK, Co. 18 Bt.....	499.30

DRESSING JARS

Flint Glass

- Lid closely fits on shoulder, but is not ground airtight
- Dimensions shown below are height, exclusive of lid x diameter
- Lid adds approximately $1\frac{1}{2}''$ to height



6170R10

6170R10	JAR, 4" x 5" x $1\frac{1}{2}''$, Ea.....	\$16.40
6170R20	JAR, 6" x 7" x $1\frac{1}{2}''$, Ea.....	25.05



Please Remember

Products listed in the Thomas Catalog are in alphabetical as well as numerical order.

DRESSING JARS

Stainless steel



- Heavy-weight, with slip-over cover
- Capacity 1.9 L, height 159 mm, diameter 121 mm

6170S30

6170S30 STAINLESS STEEL JAR, 6a 807.00

KIMBLE

KIMAX™ INVERTED SPECIMEN JARS



- Borosilicate glass, complete with corks
- Base does not extend beyond body

INVERTED SPECIMEN JARS

THOMAS NO.	SIZE	O. D. x HEIGHT (mm)	QTY.	PRICE
6174510	2 oz.	36 x 105	Each	\$10.61
6174512			Cs. 12	97.26
6174516	4 oz.	51 x 115	Each	15.24
6174518			Cs. 12	139.56
6174526	8 oz.	63 x 162		262.52

MASON JARS

Preserving



- An inexpensive preserving jar with space-conserving cross-section
- With zinc-coated metal screw cap with glass liner and rubber gasket

6176B12 and 6176B22

6176B12 MASON JAR, 1 qt., Cs. 12 \$50.00
6176B22 MASON JAR, 1 g., Cs. 12 77.20

POLYPROPYLENE MASON JARS

Naige 2115



- With 70 mm neck which fits fixtures or closures having Mason jar threads, such as Osterizer blending assemblies
- Molding ring in polypropylene cap seals against mouth of jar to prevent breakage
- Autoclavable
- Leakproof

6176C20	JAR, 500 mL, Pk. 6	545.62
6176C22	JAR, 500 mL, Cs. 24	382.46
6176C30	JAR, 1,000 mL, Pk. 6	53.17
6176C34	JAR, 1,000 mL, Cs. 24	212.68
6176C44	JAR, 2,000 mL, Pk. 4	47.20
6176C46	JAR, 2,000 mL, Cs. 12	141.00
6176C56	JAR, 3,000 mL, 6a	14.89
6176C58	JAR, 3,000 mL, Cs. 6	39.35

6176C20

Bel-Art



- Autoclavable at 121°C
- Heavy walled, with standard Mason threaded neck
- Polypropylene screw cap has sealing ring and grip lugs

6176E25

THOMAS NO.	CAPACITY (mL)	O. D. (mm)	HEIGHT (mm)	QUANTITY	PRICE
6176E25	500	81	130	Pk. 6	\$31.00
6176E27				Cs. 24	124.00
6176E35	1,000	100	178	Pk. 6	46.65
6176E37				Cs. 24	186.60
6176E45	2,000	125	213	Pk. 3	35.00
6176E47				Cs. 12	143.00
6176E60	4,000	148	285	Pk. 2	39.20
6176E62				Cs. 6	117.60
6176E60	8,000	188	334	EA.	29.95
6176E62				Cs. 6	179.70

NALGENE

CROCK-STYLE JARS WITH COVERS

Excellent storage and transport containers for waste material, chemicals, powders, supplies or specimens



6176F02

6176F10

- Combination jar and cover replaces items formerly sold separately
- Also for use as mixing vats or labware-soaking containers

6176F02 and F06 Jars are made of high-density polyethylene.

6176F10 Jar is made of polypropylene and are autoclavable.

NALGENE® JARS

THOMAS NO.	O. D. x HEIGHT (mm)	CAPACITY (L/Gal.)	QUANTITY	PRICE
POLYETHYLENE JARS (NALGE S350)				
6176F02	219 x 249	7.8/2	Ea.	\$62.14
6176F06	300 x 350	18.2/4½	Ea.	97.12
POLYPROPYLENE JARS (NALGE S352)				
6176F10	221 x 251	7.9/2	Ea.	\$57.03

QORPAK

JARS

Polypropylene Wide Mouth Jars

- Autoclavable
- Linerless caps
- Polypropylene caps
- Short form
- Straight wall design



6180R02

THOMAS NO.	CAPACITY (oz./mL)	NECK SIZE (mm)	QTY.	PRICE
6180R02	1/30	43-400	Cs. 72	\$82.41
6180R04	2/60	53-400	Cs. 48	56.38
6180R06	4/120	58-400	Cs. 36	50.17
6180R08	8/250	89-400	Cs. 36	84.30
6180R10	16/500	89-400	Cs. 24	87.30
6180R12	32/960	120-400	Cs. 24	119.33

Polystyrene Wide Mouth Jars

- SturdesSeal® P/E Foam Lined Caps
- Polypropylene caps
- Polystyrene offers almost glass-like clarity



6180R14

THOMAS NO.	CAPACITY (oz./mL)	NECK SIZE (mm)	QTY.	PRICE
6180R14	1/30	43-400	Cs. 72	\$85.50
6180R16	2/60	53-400	Cs. 48	61.23
6180R18	4/120	58-400	Cs. 36	56.09
6180R20	8/240	89-400	Cs. 36	85.82
6180R22	16/480	89-400	Cs. 24	74.95
6180R24	32/960	120-400	Cs. 24	124.45

Thomas Tips

Polypropylene (PP)

Translucent, autoclavable and has no known solvent at room temperature. It is slightly more susceptible than polyethylene to strong oxidizing agents. It offers the best stress-crack resistance of the polyolefins. Products made of polypropylene are brittle at 0°C and may crack or break if dropped from benchtop height.



QORPAK

JARS

Medium Rounds with Phenolic Caps



6180C11

- Flint glass jars; convenient packaging
- Fitted with screw caps of black phenolic plastic with cushioned, pulp/vinyl liners
- Liners will withstand the action of aqueous solutions, mild acids and mild alkalis
- Caps form a tight seal and contain no metal to corrode
- 6180C17 through C50 have molded-in graduations for measuring convenience

THOMAS NO.	CAPACITY (cc./ml.)	O. D. x HEIGHT (mm)	CAP	QUANTITY	PRICE
6180C11	130	35 x 67	33	Pk. 48	\$78.70
6180C12				Cs. 432	\$44.00
6180C17	260	41 x 85	38	Pk. 48	\$1.00
6180C18				Cs. 288	\$37.00
6180C29	4120	48 x 111	48	Pk. 24	\$0.40
6180C30				Cs. 144	\$72.00
6180C41	8240	80 x 133	58	Pk. 24	\$4.60
6180C43				Cs. 96	\$26.00
6180C47	16480	76 x 132	70	Pk. 24	\$6.10
6180C58				Cs. 48	\$55.00

Medium Rounds with Teflon®-Lined Caps



6180D69

- Similar to 6180C11 series, but with Teflon-IF-217 foam backed lined closures attached

Attached caps eliminate wasted time searching for cap and ensures the proper liner system will always be used with the corresponding bottle. User will never have a mismatch of bottle and cap quantities and two inventory items are consolidated into one.

6180D60	JAR, 1 oz., Cs. 48	\$109.54
6180D65	JAR, 2 oz., Cs. 48	119.45
6180D78	JAR, 4 oz., Cs. 24	80.81
6180D75	JAR, 8 oz., Cs. 24	105.56
6180D88	JAR, 16 oz., Cs. 24	141.39

QORPAK

STRAIGHT SIDE ROUND JARS

With Phenolic Caps



6180H09

- Jars are fitted with series 2386D35 black phenolic screw caps with cushioned, pulp/polyvinyl liner
- Flint glass

THOMAS NO.	SIZE (oz.)	O. D. x HEIGHT (mm)	CAP	QUANTITY	PRICE
6180H09	1	44 x 44	43	Pk. 48	\$97.51
6180H13	1	44 x 44	43	Cs. 384	\$75.00
6180H17	2	54 x 47	53	Cs. 24	\$1.58
6180H19	4	60 x 70	58	Cs. 24	\$4.97
6180H23	8	70 x 80	70	Cs. 24	77.56
6180H29	16	92 x 98	89	Pk. 12	\$1.59
6180H32	32	95 x 171	89	Cs. 12	\$6.79

With Teflon®-Lined Caps



6180J40

- Similar to 6180H09 series except for Teflon-Lined Caps
- Flint glass

6180J40	JAR, 1.5 oz., Cs. 80	\$142.57
6180J44	JAR, 2 oz., Cs. 24	87.54
6180J48	JAR, 4 oz., Cs. 24	95.36
6180J52	JAR, 8 oz., Cs. 24	131.47
6180J56	JAR, 16 oz., Cs. 12	161.87
6180J60	JAR, 32 oz., Cs. 12	114.36

WHEATON

GLASS JARS WITH SNAP CAPS

Flint glass, with slight shoulder

Tight fitting, lower-density polyethylene cap with thumb tab can be removed and applied easily with the same hand in which the jar is held. Cases are constructed to store jars neatly, with caps attached, in partitioned trays which can be pulled out as drawers. For replacement caps, see Thomas numbers beginning with 9714L32. See also 9714K12 series Snap Cap Vials.



6184F12 series

THOMAS NO.	CAPACITY	O.D. x HEIGHT (mm)	CAP	QUANTITY	PRICE
6184F12	1/2 oz.	30 x 40	30	Cs. 144	\$118.20
6184F16	1 oz.	37 x 50	34	Cs. 72	73.01
6184F24	2 oz.	45 x 60	45	Cs. 72	86.61
6184F36	4 oz.	50 x 95	45	Cs. 72	96.18

DYNALON

JARS WITH SNAP CAPS

Useful for storing dry materials, powders, tablets, etc.

- Rigid wall, clear polystyrene with polyethylene snap cap



6184K75

THOMAS NO.	WEIGHT (grams)	CAPACITY (oz./mL)	I.D. x HEIGHT (mm)	QUANTITY	PRICE
6184K15	3	1/10	17 x 35	Cs. 144	\$32.13
6184K20	5	1/20	22 x 51	Cs. 144	32.79
6184K25	7	1/30	25 x 51	Cs. 144	35.63
6184K30	10	1/16	25 x 79	Cs. 144	46.11
6184K35	13	1/14	30 x 71	Cs. 144	52.02
6184K40	15	1/10	33 x 62	Cs. 144	53.44
6184K50	20	2/175	38 x 64	Cs. 144	65.01
6184K60	30	4/120	44 x 75	Cs. 72	45.45
6184K70	40	5/130	44 x 97	Cs. 72	52.67

NALGENE

POLYCARBONATE WIDE-MOUTH JARS

Useful for collecting and storing pastes, solids, specimens and miscellaneous lab supplies



6184T02 series

- Nalge 2116
- Straight sides and no shoulders to trap materials
- Window-clear with high-impact resistance; non toxic
- Excellent for cold room and refrigerated use
- Autoclavable
- With white polypropylene screw closure (natural polypropylene closure on 30 and 60 mL sizes)

Closures on the 125, 250, 500 and 1,000 mL jars have recessed tops for stacking. 125 and 250 mL sizes fit Osterizers and other blenders with Mason jar threads. They also accept regular Mason jar closures. Temperature range: -135°C to +135°C. Not recommended for shipping liquids.

NOTE: before autoclaving set closure on top of jar without engaging threads.

NALGE POLYCARBONATE WIDE MOUTH JARS

THOMAS NO.	SIZE	I.D. x HEIGHT (mm)	CAP SIZE	QUANTITY	PRICE
6184T02	15 mL (5 oz)	31 x 46	36	Pk. 4	\$7.69
6184T04				Cs. 48	92.23
6184T10	30 mL (1 oz)	33 x 47	43	Pk. 4	9.24
6184T12				Cs. 48	110.92
6184T15	60 mL (2 oz)	44 x 45	53	Pk. 4	10.33
6184T17				Cs. 48	126.43
6184T25	125 mL (4 oz)	64 x 74	70	Pk. 4	18.04
6184T27				Cs. 24	108.24
6184T35	250 mL (8 oz)	64 x 118	70	Pk. 4	20.95
6184T37				Cs. 24	125.71
6184T45	500 mL (16 oz)	112 x 88	120	Pk. 4	33.16
6184T47				Cs. 16	132.65
6184T55	1,000 mL (32 oz)	112 x 151	120	Pk. 4	39.80
6184T57				Cs. 16	159.30

NALGENE

PLASTIC WIDE MOUTH JARS

Nalge 2117, Polymethylpentene



6185C37

- Autoclavable jars offer glass-like clarity with good chemical resistance
- Polymethylpentene with polypropylene screw cap
- Straight sides
- Excellent museum jars; formaldehyde loss is only 2% a year

The 125 and 250 mL sizes have Mason jar threads and are useable with Osterizer blenders.

NOTE: before autoclaving set cap on top of jar without engaging the threads.

NALGE POLYMETHYLPENTENE JARS

THOMAS NO.	SIZE	I.D. x HEIGHT (mm)	CAP SIZE	QUANTITY	PRICE
6185C37	125 mL (4 oz)	84 x 74	64	Pk. 4	\$17.88
6185C40				Cs. 24	107.20
6185C52	250 mL (8 oz)	84 x 118	64	Pk. 4	20.80
6185C55				Cs. 24	124.81
6185C72	500 mL (16 oz)	112 x 88	112	Pk. 4	33.00
6185C75				Cs. 16	132.09
6185C82	1,000 mL (32 oz)	112 x 151	112	Pk. 4	39.60
6185C85				Cs. 16	158.40

Nalge 2118, Polypropylene

- Polypropylene with polypropylene screw closure
- Translucent jars are repeatedly autoclavable, with excellent chemical resistance

NALGE POLYPROPYLENE JARS

THOMAS NO.	SIZE	I.D. x HEIGHT (mm)	CAP SIZE	QUANTITY	PRICE
6185E01	15 mL (0.5 oz)	29 x 46	38	Pk. 12	\$13.79
6185E03				Cs. 72	82.72
6185E15	30 mL (1 oz)	33 x 47	43	Pk. 12	14.67
6185E17				Cs. 72	87.99
6185E25	60 mL (2 oz)	44 x 48	53	Pk. 12	15.56
6185E27				Cs. 48	82.24
6185E35	125 mL (4 oz)	84 x 74	70	Pk. 12	24.40
6185E37				Cs. 36	73.19
6185E46	250 mL (8 oz)	84 x 118	70	Pk. 6	15.62
6185E47				Cs. 36	93.69
6185E59	500 mL (16 oz)	111 x 88	120	Pk. 6	23.42
6185E7				Cs. 24	93.69
6185E65	1,000 mL (32 oz)	111 x 151	120	Pk. 6	33.30
6185E67				Cs. 24	133.55

WIDE MOUTH JARS

Norton/Chemware® Teflon PFA



6185G30

- Superior chemical resistance

Straight-sided, with linerless, threaded screw cap. Thick, heavy-duty construction. Autoclavable with wide temperature range of -270°C to +250°C. Walls are translucent with ribs on four sides. Knurled cap has molded inner ring which seals against mouth of jar. Stackable.

6185G30	JAR, 60 mL	.....	\$17.83
6185G40	JAR, 120 mL	.....	59.30
6185G50	JAR, 240 mL	.....	77.65
6185G75	JAR, 1,000 mL	.....	224.29

Nalgene® Teflon PFA



6185H90

- Nalge 2113
- Of chemical resistant Teflon PFA
- Temperature range -270° to +288°C
- Autoclavable

For storage of high-purity samples and standards. Thick, rigid, translucent walls and wide base for stability on bench top. Wide mouth offers easy access to contents. Screw cap closure is leakproof. Capacity 1,000 mL.

6185H90	WIDE MOUTH JAR	\$150.32
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Ekay Disposable Polyethylene Jars



6185T05 and 6185T10

- Of high-density polyethylene with press-on lids
- Resists most laboratory solutions, including formaldehyde
- Stackable and can be nested for storage

DISPOSABLE POLYETHYLENE JARS

THOMAS NO.	CAPACITY (mL)	O.D. x HEIGHT (mm)	QUANTITY	PRICE
6185T05	474	88 x 95	Cs. 100	\$51.90
6185T10	1,892	165 x 168	Cs. 500	66.40

DYNALON

WIDE MOUTH JARS

High-density polyethylene jars

- White opaque jars with tight-fitting lids
- Designed to simplify and standardize the handling and storage of specimens
- Excellent chemical resistance



6185U10 series

Cannot be attacked by formaldehyde, weak acids or bases. Resists freezing or boiling temperatures.

Easily disposable but sturdy enough for reuse.

DYNALON DISPOSABLE JARS

THOMAS NO.	SIZE (oz.)	APPROXIMATE DIMENSIONS (I.D. x H., in.)	QUANTITY	PRICE
6185U10	4	2½ x 1½	Cs. 250	\$74.85
6185U15	7½	2½ x 2½	Cs. 250	76.49
6185U28	16	2½ x 3½	Cs. 100	43.60
6185U25	32	3½ x 4½	Cs. 100	73.54
6185U30	64	5½ x 6	Cs. 50	70.37
6185U35	168	7½ x 8½	Cs. 25	64.91

Polyethylene wide mouth jars

- Molded of translucent white linear polyethylene
- Non-breakable
- Lightweight

Long shelf life. Easy to store, require little space.



6185U50

DYNALON DISPOSABLE JARS

THOMAS NO.	SIZE (oz.)	APPROXIMATE DIMENSIONS (I.D. x H., in.)	QUANTITY	PRICE
6185U50	4	2½ x 1½	Cs. 250	\$72.12
6185U65	7½	2½ x 2½	Cs. 250	79.77
6185U60	16	2½ x 3½	Cs. 100	47.54
6185U65	32	3½ x 4½	Cs. 100	75.61
6185U70	64	5½ x 6	Cs. 50	65.13
6185U75	168	7½ x 8½	Cs. 25	72.34

LAB-TEK

DISPOSABLE SAMPLE CONTAINERS

- Available in polypropylene, polystyrene and polyethylene to better fit your laboratory needs
- Friction-fit type lid

Resistant to certain solvents and freezing. Virtually free of trace metals or lubricants.



6186E50

Polypropylene Sample Containers

6186E50	CONTAINER, 8 oz., Cs. 120	\$40.00
6186E52	CONTAINER, 16 oz., Cs. 120	35.08
6186E54	CONTAINER, 32 oz., Cs. 120	72.42

Polystyrene Sample Containers

6186E30	CONTAINER, 8 oz., Cs. 150	\$33.99
6186E58	CONTAINER, 16 oz., Cs. 150	66.48
6186E60	CONTAINER, 32 oz., Cs. 150	70.08

Polyethylene Sample Containers

6186E62	CONTAINER, 85 oz., Cs. 24	\$34.12
6186E64	CONTAINER, 172 oz., Cs. 20	48.00

Multipurpose Polystyrene Specimen Containers

- Designed for collection, transport and storage of lab specimens
- Economically priced

6186F20	JAR, 7 oz., Cs. 500	\$75.06
6186F30	LID, Bx. 500	30.46
6186F32	LID, Cs. 5000	274.32

CORNING

STERILE SAMPLE JARS

- Polypropylene jars with snug-fitting, polyethylene caps
- Economical

Flexible container can be used as a beaker, specimen collection vessel or storage container. Calibrated in both millimeters and ounces. Jars and caps can be ordered separately.



6186L05

6186L05	JAR with Cap, 250 mL, Cs. 100	\$151.00
6186L10	JAR, 250 mL, Cs. 500	487.66
6186L15	CAP, Cs. 500	152.76

BD BIOSCIENCES

FALCON® STERILE SNAP CAP JARS



6186M40 (left) and 6186M10

- Polypropylene
- Sterilized by gamma radiation
- Autoclavable
- 4½ and 8 oz. capacity available

Jars are graduated in ½ oz. and 10 mL intervals. Jars with caps are individually wrapped. Jars without caps are packaged in sleeves of 20. Caps are polyethylene and cannot be autoclaved.

6186M10	JAR w/Cap, 4½ oz., Co. 100	97.90
6186M20	JAR, 6½ oz., Co. 500	39.80
6186M40	JAR w/Cap, 8 oz., Co. 100	102.80
6186M50	JAR, 8 oz., Co. 500	72.90
6186M60	CAP, Polyethylene, Co. 500	90.30

KENDALL

SPECIMEN CONTAINERS

StickSafe Series



6188A72

helps maintain sterility. Second port allows lab access without removing cap, reducing exposure to risk.

- Dual ports for safe, easy access
- Self-sealing
- Addresses most recent legislative mandates on blood-borne pathogen safety regulations

Unique cap design has needle entry port that self-seals following specimen injection/withdrawal with up to 18-gauge needle, which

6188A72	INJECTABLE CONTAINER, Sterile, 120 mL, IWP, Co. 100	298.71
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KENDALL

SPECIMEN CONTAINERS

General Purpose



6186M80 and 6186M63

- Durable polypropylene
- Full turn thread for improved sealing.
- Meets NCCLS guidelines (M29-T2, Vol.11, No. 14)

These 4 oz., 120 mL containers have molded metric and U.S. graduations on two sides. The walls are thicker and more resilient, making them shatter resistant. The cap is flat and frosted to accommodate either a label or a write-on ID and is ribbed to provide an extra grip for effective sealing and easy opening. Tolerates strong acids, bases and most organic solvents.

Green caps have tamper-resistant, integrity seal and are sterile. 6186M80 and M82 are sterile, blister-packed individually. 6186M91 is non-sterile with blue cap and holds 4.5 oz. (120 mL). 6186M95 is sterile, blue, blister packed.

6186M90	SPECIMEN CONTAINER, Sterile, White Cap, IDWP Pk. 100	354.50
6186M82	SPECIMEN CONTAINER, Sterile, White Cap, IDWP Pk. 200	132.00
6186M63	SPECIMEN CONTAINER, Sterile, Green Cap, W/Seal, IDWP Co. 100	26.74
6186M87	SPECIMEN CONTAINER, NS, White Cap, Bulk, Prepackaged, Co. 500	84.89
6186M90	SPECIMEN CONTAINER, Sterile, w/ Seal, Green Cap, Bulk, Co. 100	24.95
6186M91	SPECIMEN JAR, NS, Co. 400	39.30
6186M95	SPECIMEN CONTAINER, Sterile, w/Seal, Green Cap, IDWP Co. 200	42.91
6186M96	CUP, Sterile, w/Blue Cap, IDWP Pk. 100	42.00

Let us quote your next order!



Our trained telephone representatives can help you select the products you need and provide a competitive price quote. We can suggest the best buying quantities for maximum savings. Our experienced quotations staff has

immediate access to over 250,000 competitively-priced instruments, supplies and reagents.

ELKAY

STACTITE® SPECIMEN CONTAINER*Premium performance polypropylene container*

- Full turn thread
- Work in pneumatic tube systems
- Frosted write-on areas on cup and cap

Precision molded, 120 mL polypropylene cups are shatterproof and leaktight. Cups feature easy-to-read graduations in 10 mL increments.

Sterile banded packaging assures interior sterility until plastic peel-off strip is removed.

6189G30	STACTITE SPECIMEN CONTAINER, Non-Sterile, Co. 500	880.00
6189G32	STACTITE SPECIMEN CONTAINER, Sterile-Banded, Pk. 100	33.85
6189G34	STACTITE SPECIMEN CONTAINER, Sterile-Banded, Pk. 250	89.90



6189G30

KENDALL

SAGE® STERILE SPECIMEN CONTAINERS*Minimize chance of leakage and prevent loss of specimen*

- Meet NCCLS standards
- Clear polypropylene construction with graduations
- Metal lids with plastisol lining

Highly visible positive seal indicator clearly shows container is sealed when red bars are lined up. Suitable for a variety of clinical and biological specimens.

Provided with pressure-sensitive, patient-identification labels. With slightly tapered sides.

6189F15	SPECIMEN CONTAINER, 5 oz., w/ Positive Seal, Co. 100	891.00
6189F17	SPECIMEN CONTAINER, 7 oz., Graduated, Non-Sterile, w/ Metal Lid	116.25
6189F55	SPECIMEN CONTAINER, 7 oz., Sterile, w/ Cap, D.R. Center Strip Packaging, Case 100	86.91
6189F67	SPECIMEN CONTAINER, 5 oz., Operating Room Sterile, Co. 100	146.10
6189F68	SPECIMEN CONTAINER, 2 oz., Co. 200	120.75
6189F69	SPECIMEN CONTAINER, 5 oz., Wide Mouth, Co. 200	132.45
6189F70	SPECIMEN CONTAINER, 5 oz., 4 Boxes of 50, Co. 200	123.45
6189F73	SPECIMEN CONTAINER, 5 oz., 8 Boxes of 25, Co. 200	130.72
6189F76	SPECIMEN CONTAINER, 5 oz., w/ Positive Seal Indicator, Co. 400	199.50



6189F75 series

KENDALL

PRECISION® SPECIMEN CONTAINERS*Polypropylene containers*

- Polyethylene caps
- Available options for sterile, caps, tamper seals and shippers

Screw cap specimen containers utilize a full one and one quarter turn screw-thread cap, which provides an excellent "Leak Resistant" seal and meets the NCCLS Specimen Handling Guidelines for primary containers (M29-T2, Vol. 11, No. 14). These versatile, graduated, translucent polypropylene containers with polyethylene caps tolerate strong acids, bases and most organic solvents and can be used for almost any liquid or solid specimen as either a storage or transport container.

Models 6189F40 and F43 are ideal for pneumatic tube transport systems. Models 6189F58 and F64 feature convenient, quick-seal snap caps.

Precision sterile graduated 4 oz. containers with straight-walled and metal screw-on caps and Tamper-Evident seals

6189F40	SPECIMEN CONTAINER, Sterile, w/ Seal, Case 200	\$101.20
6189F43	SPECIMEN CONTAINER, NS, w/ Seal, Case 400	141.05

Precision 20 mL mailing container with identification label and screw cap

6189F46	SPECIMEN CONTAINER, 20 mL, Sterile, w/ D, Case 200	\$81.00
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Precision 5 oz. graduated wide mouth container with snap caps

6189F58	SPECIMEN CONTAINER, Non-Sterile, w/ Cap, Case 500	\$49.20
6189F59	SPECIMEN CONTAINER, Sterile, w/ Snap Caps	58.79
6189F60	SPECIMEN CONTAINER, Non-Sterile, w/ Snap Caps	61.37
6189F61	PLASTIC SNAP CAPS FOR 6189F58, Non-Sterile, Case 500	27.95
6189F64	SPECIMEN CONTAINER, O.R., Sterile, w/ Snap Cap, Case 100	55.77



6189F40



Thomas Tips

Polypropylene, PP

Similar to polyethylene, but each unit of the chain has a methyl group attached. It is translucent, autoclavable, and has no known solvent at room temperature. It is slightly more susceptible than polyethylene to strong oxidizing agents. It offers the best stress-crack resistance of the polyolefins. Products made of polypropylene are brittle at 0°C and may crack or break if dropped from benchtop height.

BIOLOGICAL SPECIMEN CONTAINMENT SYSTEMS

User-friendly design



6189F50

- Capacity: 90 mL
- Sterile polypropylene
- Stackable

Heavy Duty Polyethylene Lids produce an audible click to verify container is properly sealed. Lids have a special thread design to provide tight and leakproof closure. Containers are tested for leakage in high vacuum environments to assure safer sample

transferring and handling. Label allows sample information to be placed on the container.

6189F50	CONTAINER, 90 mL, Sterile, Bag 100	\$10.40
6189F52	CONTAINER, 90 mL, Sterile, Cs. 400	41.90

NUNC

UNIVERSAL CONTAINERS

Designed for safe, secure handling and transport of biological specimens



6189J05



6189J25

- Self-standing clear polystyrene tube, with molded graduation to 25 mL
- Polyethylene screw cap is designed to prevent droplets from adhering to it; reduces the risk of aerosol formations when it is removed
- Fins in recessed top of cap can be gripped with forceps for removal from centrifuge rotors

6189J05 Transport Jars have polyethylene caps that are designed to prevent droplets from adhering to reduce the risk of aerosol formations when cap is removed.

6189J10 Containers are sterilized by gamma radiation and include writing area.

6189J20 and 6189J25 Containers are packaged under the strictest aseptic conditions. 6189J20 has writing area; 6189J25 is clear.

Packaged in sleeves of 50; case contains six sleeves.

6189J05	TRANSPORT JARS, For Universal Containers, Cs. 300	\$234.00
6189J10	UNIVERSAL CONTAINER, Sterile, w/ Writing Area, 25 mL, Cs. 300	25.15
6189J20	UNIVERSAL CONTAINER, Aseptic, w/ Writing Area, 25 mL, Cs. 300	301.56
6189J25	UNIVERSAL CONTAINER, Aseptic, Clear, 25 mL, Cs. 300	137.23

CORNING

PYREX® JARS



6192D04

- Mold-blown with substantial walls for mechanical strength
- Rim of 152 mm diameter jars is fine-polished; other sizes have ground rim
- Can also be used as animal jars

Without lids. Capacity and o.d. x height are shown in listings.

6192D04	JAR, 2 Gal., 222 x 254 mm, Ea.	\$256.12
6192D06	JAR, 2 Gal., 222 x 254 mm, Cs. 4	758.16
6192D40	JAR, 2½ Gal., 257 x 254 mm, Ea.	279.99
6192D52	JAR, 4½ Gal., 305 x 305 mm, Ea.	382.36
6192D64	JAR, 7 Gal., 335 x 457 mm, Ea.	449.50
6192D70	JAR, 8½ Gal., 406 x 305 mm, Ea.	706.43

Round Chromatography Jars



6193K22

- Tops are ground to close tolerances to insure tight cover fits
- 152 mm jar edge is flat within 0.1 mm; all others are flat within 0.25 mm

Without covers. Capacity and o.d. x height are shown in listings.

6193K22	JAR, 1½ Gal., 152 x 457 mm, Ea.	\$194.63
6193K32	JAR, 3½ Gal., 222 x 457 mm, Cs. 4	1,211.00
6193K42	JAR, 9½ Gal., 305 x 610 mm, Ea.	622.18

CORNING

PYREX® JARS

Rectangular Chromatography Jar



6192M12

- Top edge is ground flat within 0.25 mm to permit seal with flat cover
- Of Pyrex borosilicate glass

Without covers. Capacity and dimensions (L x W x D, mm) are given in listings.

6192M12	JAR, 1 Gal., 162 x 137 x 267, Co. 9	.....	\$749.76
6192M18	JAR, 3 Gal., 238 x 181 x 324, Co. 12	.....	353.56
6192M24	JAR, 6 Gal., 308 x 308 x 305, Co. 6	.....	535.99
6192M30	JAR, 12 Gal., 308 x 308 x 618, Co. 2	.....	152.83

SQUARE BATTERY JAR



6193A35

- Flint glass, with ground rim

Dimensions: 102 x 102 x 203 mm.

6193A35	BATTERY JAR	\$18.00
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NALGENE

PIPET JARS

Nalge 5242 Polyethylene Jars

- Cross-linked, high density polyethylene
- Resilient; safer than glass
- Tough, stiff, seamless jars resist stress-cracking

Ideal for soaking glassware, washing pipets with corresponding rinsers and baskets (see Thomas number 7792H7B). All sizes have flanged base for added stability. Capacity and o.d. x height given in listings.

CAUTION: concentrated sulfuric acid-dichromate compound acid concentration must be 60% or less. The formula shown on the jar's label is effective and lasts longer than standard solutions. Do not mix this solution in the pipet jar. Keep jar on a drainboard, in a sink or in a container large enough to retain jar contents in case of leakage. The 5-gallon, heavy-duty cylindrical container is recommended for storing the pipet jar when using this solution.



6204D16

6204D16	JAR, 1 Gal., 165 x 229 mm, Co. 12	.....	502.73
6204D18	JAR, 1 Gal., 165 x 229 mm, Co. 12	.....	636.75
6204D22	JAR, 1 Gal., 127 x 457 mm, Co. 6	.....	74.96
6204D24	JAR, 1 Gal., 127 x 457 mm, Co. 6	.....	449.86
6204D28	JAR, 2½ Gal., 165 x 514 mm, Co. 6	.....	386.42
6204D30	JAR, 2½ Gal., 165 x 514 mm, Co. 6	.....	530.50
6204D34	JAR, 3½ Gal., 165 x 688 mm, Co. 6	.....	128.45
6204D36	JAR, 3½ Gal., 165 x 688 mm, Co. 6	.....	722.80
6204D40	JAR, 5 Gal., 175 x 914 mm, Co. 2	.....	177.89
6204D42	JAR, 5 Gal., 175 x 914 mm, Co. 2	.....	354.38

NALGENE

LARGE JARS

Cylindrical Polycarbonate Jars With Cover

- Nalge 5300
- Completely transparent, multipurpose containers with high-impact strength
- Excellent for use as water baths, aquaria, terraria or freeze-drying chambers
- Autoclavable
- Usable at temperatures up to +135°C
- Walls are 3 mm thick; can be drilled or tapped



6205C34

Strong enough for direct clamping of accessory equipment. Resistant to aqueous salt solutions, dilute acids, oils, propanol and higher alcohol; attacked by alkalies, strong acids and many organic solvents. Capacity and dimensions given in listings.

6205C15	JAR with COVER, 1 Qt., 133 x 102 mm, Co. 12	.....	\$41.55
6205C20	JAR with COVER, 2 Qt., 121 x 229 mm, Co. 12	.....	54.65
6205C34	JAR with COVER, 4.7 Liter, 1½ Galon, 168 x 295 mm, Co. 12	.....	70.70
6205C42	JAR with COVER, 8.3 Liter, 2½ Galon, 222 x 254 mm, Co. 12	.....	113.70
6205C46	JAR with COVER, 16.8 Liter, 5 Galon, 302 x 302 mm, Co. 12	.....	177.17

NALGENE

LARGE JARS

Round, High-Density Polyethylene Jars With Covers



6205613

- Nalge 5350
- With friction-fit covers

Useful as specimen containers and for storing or transporting solids. Capacity and o.d. x height given in listings.

6205613	JAR, 1 Qt., 133 x 102 mm, Ea.	\$25.91
6205615	JAR, 1 Qt., 133 x 102 mm, Co. 6	155.46
6205619	JAR, 2 Qt., 127 x 191 mm, Ea.	29.90
6205621	JAR, 2 Qt., 127 x 191 mm, Co. 6	179.38
6205625	JAR, 1 Gal., 186 x 241 mm, Ea.	34.33
6205627	JAR, 1 Gal., 186 x 241 mm, Co. 6	205.90

Round, High-Density Polyethylene Jars With Covers



6205602

- Chemical and temperature resistant
- Stackable, with easy-grip handles

For storing and transporting dry and solid material, specimens and general lab supplies. Positive lock lids assure a tight seal. Capacity and o.d. x height given in listings.

6205602	JAR, 4 Gal., 309 x 241 mm, Ea.	\$28.26
6205606	JAR, 4 Gal., 309 x 241 mm, Co. 6	169.54
6205620	JAR, 5.3 Gal., 309 x 381 mm, Ea.	41.94
6205626	JAR, 5.3 Gal., 309 x 381 mm, Co. 6	251.85
6205635	JAR, 6 Gal., 394 x 309 mm, Ea.	43.90
6205642	JAR, 6 Gal., 394 x 309 mm, Co. 6	263.74

KEY CADDIES



6205644

- Heavy-duty, chrome-plated, die-cast case
- Extra-long, stainless steel chain

Returns keys and other articles automatically. Ideal for use with key chain timers (Thomas number 9370825) and key chain microtube cap flipper (see 2591F50). Available with regular belt clip that clips over belt or a looped clip that the belt feeds through.

6205644	KEY CADDY, Regular Clip	\$14.20
6205646	KEY CADDY, Looped Clip	14.30



MULTI-FUNCTION KNIFE

11 blades, 15 functions



6235401

This versatile pocket knife is a must-have item. It can be used in the lab or in the field. The clean, white body features 11 blades and functions: slot screwdriver, Phillips screwdriver, file, corkscrew, 2" cutting blade, 2/5" saw blade, scaler/scrapper, scissors, bottle/tube opener, can opener, hook/staple remover, punch, awl, toothpick and tweezers. The knife also has a loop for key ring attachment or for

hanging on a hook. The unit weighs 3.7 ounces (105 g) and measures 3.5 x 1 inch (with blades closed).

6235401	MULTI-FUNCTION KNIFE	\$9.90
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PRECISION LAB KNIFE SET



6235H10

- Exceptionally sharp knives are ideal for delicate, accurate cutting needs
- Has positive holding blade lock and non-slip handles

Set includes 44 blades of high-grade steel, ground to razor sharpness for precise cutting; 6 different handles, aluminum oxide sharpening stone and durable plastic case.

6235H10	LAB KNIFE SET	\$60.00
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PRESSURE-SENSITIVE LABELING TAPES

Vinyl Tapes

- Vinyl-covered paper tapes, backed with self-sticking, bacteriostatic adhesive
- Can be marked with pencil, pen or ball-point; helpful for coding of samples, etc.
- Tape adheres to glass, metals, polyethylene, Teflon®, wax, rubber, paper and cloth
- Can withstand temperatures from -55° to 120°C
- Resistant to soiling and to acids, alkalis, oils and steam

Label tapes are available in three widths: 1/2", 3/4" and 1". White Label Tapes are also available in 1 1/2" and 2" widths. Optional multi-roll dispenser (Thomas number 6258M10) shown on next page. Label Tape Assortment, Thomas number 6258L70, includes one 3/4" wide roll each of white, yellow, orange, red, light green and blue label tapes. Dimensions: 500 inch (12.7 m) rolls; 1 inch core. Package contains six rolls of tape.



6258602 series

Aqua Label Tapes

6258652	LABEL TAPE, 1/2", Pkg	\$24.90
6258659	LABEL TAPE, 3/4", Pkg	37.50
6258666	LABEL TAPE, 1", Pkg	40.32

Black Label Tapes

6258622	LABEL TAPE, 1/2", Pkg	\$24.90
6258629	LABEL TAPE, 3/4", Pkg	37.50
6258636	LABEL TAPE, 1", Pkg	40.32

Dark Brown Label Tapes

6258604	LABEL TAPE, 1/2", Pkg	\$24.90
6258671	LABEL TAPE, 3/4", Pkg	37.50
6258678	LABEL TAPE, 1", Pkg	40.32

Copper Label Tapes

6258627	LABEL TAPE, 1/2", Pkg	\$24.90
6258635	LABEL TAPE, 3/4", Pkg	37.50
6258642	LABEL TAPE, 1", Pkg	40.32

Dark Green Label Tapes

6258666	LABEL TAPE, 1/2", Pkg	\$24.90
6258673	LABEL TAPE, 3/4", Pkg	37.50
6258680	LABEL TAPE, 1", Pkg	40.32

Lavender Label Tapes

6258642	LABEL TAPE, 1/2", Pkg	\$24.90
6258649	LABEL TAPE, 3/4", Pkg	37.50
6258657	LABEL TAPE, 1", Pkg	40.32

Pink Label Tapes

6258676	LABEL TAPE, 1/2", Pkg	\$24.90
6258685	LABEL TAPE, 3/4", Pkg	37.50
6258692	LABEL TAPE, 1", Pkg	40.32

Salmon Label Tapes

6258637	LABEL TAPE, 1/2", Pkg	\$24.90
6258644	LABEL TAPE, 3/4", Pkg	37.50
6258651	LABEL TAPE, 1", Pkg	40.32

Silver Label Tapes

6258F76	LABEL TAPE, 1/2", Pkg	\$24.90
6258F83	LABEL TAPE, 3/4", Pkg	37.50
6258F90	LABEL TAPE, 1", Pkg	40.32

Tan Label Tapes

6258633	LABEL TAPE, 1/2", Pkg	\$24.90
6258640	LABEL TAPE, 3/4", Pkg	37.50
6258647	LABEL TAPE, 1", Pkg	40.32

Violet Label Tapes

6258672	LABEL TAPE, 1/2", Pkg	\$24.90
6258679	LABEL TAPE, 3/4", Pkg	37.50
6258686	LABEL TAPE, 1", Pkg	40.32

White Label Tapes

6258612	LABEL TAPE, 1/2", Pkg	\$24.90
6258619	LABEL TAPE, 3/4", Pkg	37.50
6258626	LABEL TAPE, 1", Pkg	40.32
6258644	LABEL TAPE, 1 1/2", Pkg	45.30
6258653	LABEL TAPE, 2", Pkg	61.86

Yellow Label Tapes

6258672	LABEL TAPE, 1/2", Pkg	\$24.90
6258679	LABEL TAPE, 3/4", Pkg	37.50
6258686	LABEL TAPE, 1", Pkg	40.32

Orange Label Tapes

6258117	LABEL TAPE, 1/2", Pkg	\$24.90
6258124	LABEL TAPE, 3/4", Pkg	37.50
6258133	LABEL TAPE, 1", Pkg	40.32

Red Label Tapes

6258162	LABEL TAPE, 1/2", Pkg	\$24.90
6258169	LABEL TAPE, 3/4", Pkg	37.50
6258178	LABEL TAPE, 1", Pkg	40.32

Light Green Label Tapes

6258607	LABEL TAPE, 1/2", Pkg	\$24.90
6258614	LABEL TAPE, 3/4", Pkg	37.50
6258623	LABEL TAPE, 1", Pkg	40.32

Blue Label Tapes

6258652	LABEL TAPE, 1/2", Pkg	\$24.90
6258659	LABEL TAPE, 3/4", Pkg	37.50
6258666	LABEL TAPE, 1", Pkg	40.32
6258L70	LABEL TAPE ASSORTMENT	37.50



PRESSURE SENSITIVE LABELING TAPES

Multiple Label Tape Dispenser



6258M10 (tapes not included)

- For 6258B52 through L70 series tape
- For tapes in 500" (12.7 m) rolls with a 1" (25 mm) core
- Four 2" (51 mm) tape mounting bars are individually removable for replacement of tapes
- Flat thumb bar has serrated tear-off edge at front

Enameled metal housing has non-skid, foam-rubber strips on base. Overall dimensions 305 x 140 x 89 mm high.

6258M10 MULTIPLE DISPENSER \$34.50

Multiple Label Tape Dispenser, 3 Inch Core



6258F40 (tapes not included)

- For 6258Q12 series and 6259E10 series label tapes
- Four 2" wide tape mounting bars are individually removable for replacement of tapes
- Flat thumb bar has serrated tear-off edge at front

Enameled metal housing has non-skid, foam-rubber strips on base. Overall dimensions 305 x 140 x 89 mm high.

6258F40 MULTIPLE LABEL TAPE DISPENSER \$37.50

Extra Long Pressure-Sensitive Labeling Tapes



6258Q12 series

- Similar to 6258B52 series, except in 60 yard (54.9 m) rolls
- Can be marked with pencil, pen or ball-point
- Tape adheres to glass, metals, polyethylene, Teflon[®], wax, rubber, paper and cloth
- Unaffected by temperatures from -55° to +120°C
- Tape width is shown in listings; core is 3 inches

Red Label Tape

6258Q12	LABEL TAPE, 1/2 in., Pk. 6	..... \$36.30
6258Q22	LABEL TAPE, 3/4 in., Pk. 6	..... 81.95
6258Q32	LABEL TAPE, 1 in., Pk. 6	..... 103.40

White Label Tape

6258R12	LABEL TAPE, 1/2 in., Pk. 6	..... \$36.37
6258R22	LABEL TAPE, 3/4 in., Pk. 6	..... 81.95
6258R32	LABEL TAPE, 1 in., Pk. 6	..... 103.40

Yellow Label Tape

6258S42	LABEL TAPE, 1/2 in., Pk. 6	..... \$36.37
6258S52	LABEL TAPE, 3/4 in., Pk. 6	..... 81.95
6258S62	LABEL TAPE, 1 in., Pk. 6	..... 103.40

Orange Label Tape

6258R72	LABEL TAPE, 1/2 in., Pk. 6	..... \$36.37
6258R82	LABEL TAPE, 3/4 in., Pk. 6	..... 81.95
6258R92	LABEL TAPE, 1 in., Pk. 6	..... 103.40

Blue Label Tape

6258S12	LABEL TAPE, 1/2 in., Pk. 6	..... \$36.37
6258S22	LABEL TAPE, 3/4 in., Pk. 6	..... 81.95
6258S32	LABEL TAPE, 1 in., Pk. 6	..... 103.40

Green Label Tape

6258S42	LABEL TAPE, 1/2 in., Pk. 6	..... \$36.37
6258S52	LABEL TAPE, 3/4 in., Pk. 6	..... 81.95
6258S62	LABEL TAPE, 1 in., Pk. 6	..... 103.40

Lavender Label Tape

6258S72	LABEL TAPE, 1/2 in., Pk. 6	..... \$36.37
6258S82	LABEL TAPE, 3/4 in., Pk. 6	..... 81.95
6258S92	LABEL TAPE, 1 in., Pk. 6	..... 103.40

LABEL TAPE DISPENSER



6258D50

- Built-in 4 x 6 inch writing platform with finger holes and cutting edge to permit one-handed removal and cutting of tape
- Weighted base has foam rubber pad
- Accepts tapes with a maximum diameter up to 5 1/2" and the 3" core fits standard tape rolls up to 1" wide
- Base is 8 1/2" x 3 1/2" x 3 1/2"

6258D50 LABEL TAPE DISPENSER \$52.50

WHITE LABEL TAPE

Continuous Roll



6259E10

- White paper tapes in 40 yard (36.5 m) rolls backed with self-sticking adhesive
- Can be marked with pencil, ball-point pen or solvent ink marker
- Adhere to glass, metal or plastic
- Usable in temperatures from -73°C to +121°C (-99° to +250°F)
- Withstands repeated autoclaving
- Can be peeled off without leaving a sticky residue
- Tape width is shown in listings; core is 3 inches

NOTE: can be used with 6258F40 dispenser.

6259E10	LABEL TAPE, 1/2 in., Roll	..... \$9.95
6259E12	LABEL TAPE, 1/2 in., Co. 24	..... 166.80
6259E20	LABEL TAPE, 3/4 in., Roll	..... 9.20
6259E22	LABEL TAPE, 3/4 in., Co. 24	..... 226.80
6259E30	LABEL TAPE, 1 in., Roll	..... 11.55
6259E32	LABEL TAPE, 1 in., Co. 24	..... 277.30

RED BORDER LABELS



6260K12

- White, in continuous 500 inch (12.7 m) rolls imprinted with red-bordered rectangles, width x length indicated below

6260K10 provides 300 labels; 6260K15 provides 200 labels. Without dispenser.

6260K10	LABELS, 1 x 1 1/2 in., Rl.	\$7.77
6260K12	LABELS, 1 x 1 1/2 in., Pk. 6	46.62
6260K15	LABELS, 1 1/2 x 1 1/2 in., Rl.	9.70
6260K17	LABELS, 1 1/2 x 1 1/2 in., Pk. 6	58.20

SPECIALTY REAGENT LABELS

Designed to aid in internal quality control and compliance issues



6260M15

- Permanent adhesive
- Red and black ink on white stock
- Large and small sizes to fit any job

Bright red border makes it easy to find samples. Labels have ample space to write the reagent being used, date received, expiration date and initials. Labels are available in two sizes. Model 6260M10 labels measure 1" x 2 1/2"; Model 6260M15 labels are 1 1/2" x 4".

6260M10	LABELS, Small, Pk. 100	\$7.00
6260M15	LABELS, Large, Pk. 100	18.90

PRESSURE SENSITIVE DOTS

Easily marked by typewriter, pencil or pen



6262C10

- Multi-colored
- 1/8" diameter
- Supplied on sheets of waxed paper backing; permanent adhesive

6262C10	DOTS, White, Pk. 1,000	\$13.65
6262C20	DOTS, Yellow, Pk. 1,000	13.65
6262C30	DOTS, Red, Pk. 1,000	13.65
6262C40	DOTS, Blue, Pk. 1,000	13.65
6262C50	DOTS, Pk. 1,000	13.65

PRESSURE SENSITIVE SLIDE LABELS

Smudge resistant



6263N25

- Plain white, 3/16" (24 mm) square, of plastic-coated paper with self-sticking adhesive back
- Easily marked with pencil or pen
- Supplied in sheets of 40 labels, on waxed-paper backing
- Labels are 0.0135 inches thick

6263N25	LABEL, 3/16 inch, 13.5 mil, Pk. 1,000	\$29.75
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LASER CRYO-BABIES

Specialty designed to readily accept laser printing



6263R01

- Will not jam in printer

6263R01	LASER CRYO-BABIES, 1.26" x 0.5", Pk. 1,700	\$60.00
6263R04	LASER CRYO-BABIES, 0.94" x 0.5", Pk. 2,300	80.00
6263R07	LASER CRYO-BABIES, 1.56" x 0.75", Pk. 1,200	90.00
6263R09	LASER CRYO-BABIES, 1.85" x 0.75", Pk. 1,040	90.00

TOUGH-SPOTS™ LABELS

Pre-cut, peel-off, round labels for microcentrifuge tube tops



6263R80

- Chemically resistant white polyvinyl labels
- Adhere to all plastics without cracking, peeling or degrading
- Can withstand boiling water baths, autoclaving, freezing and cryogenic liquid nitrogen storage

Tough-Spots are useful for tagging a wide range of small containers in the research and clinical laboratory. Just write, peel back the release paper and affix to the top of 1.5-2.0 mL or 0.5 mL microtubes or flat-top cryovials. Tough-Spots will accept any marking instrument.

6263R80	TOUGH-SPOTS, 0.375" dia., Pk. 1,000	\$25.00
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TOUGH-TAGS™

Pre-cut peel-off labels sized to fit microcentrifuge tubes and other containers

- Chemically inert polyester
- Will not dry up or fall off
- Easy to write on
- Smear resistant

Tough-Tags withstand steam-autoclaving, boiling water baths, humid incubators, freezing temperatures to -20°C, organic solvents, caustic agents and other challenges without peeling. Tags have strong adhesion to all plastics and other materials.

Teeny Tough Tags

6263R13

- White tags fit perfectly around 0.2 mL microtubes
- Dimensions: 0.26" x 0.81"

6263R13 TOUGH-TAGS, Teeny, Pk. 1,000 \$30.00

Microcentrifuge Tube Tough Tags

6263R16

- Tubes with tags slide easily in and out of rotors
- Dimensions:
Small: 0.94" x 0.5"
Large: 1.25" x 0.5"

6263R16	TOUGH-TAGS, Clear, For 0.5 to 0.65 mL Tubes, Pk. 1,000	\$25.00
6263R19	TOUGH-TAGS, White, For 0.5 to 0.65 mL Tubes, Pk. 1,000	25.00
6263R22	TOUGH-TAGS, Clear, For 1.5 to 2.0 mL Tubes, Pk. 1,000	25.00
6263R25	TOUGH-TAGS, White, For 1.5 to 2.0 mL Tubes, Pk. 1,000	25.00
6263R28	TOUGH-TAGS, Red, For 0.5 to 0.65 mL Tubes, Pk. 1,000	25.00
6263R31	TOUGH-TAGS, Red, For 1.5 to 2.0 mL Tubes, Pk. 1,000	25.00
6263R34	TOUGH-TAGS, Yellow, For 0.5 to 0.65 mL Tubes, Pk. 1,000	25.00
6263R37	TOUGH-TAGS, Yellow, For 1.5 to 2.0 mL Tubes, Pk. 1,000	25.00
6263R40	TOUGH-TAGS, Blue, For 0.5 to 0.65 mL Tubes, Pk. 1,000	25.00
6263R43	TOUGH-TAGS, Blue, For 1.5 to 2.0 mL Tubes, Pk. 1,000	25.00
6263R46	TOUGH-TAGS, Green, For 0.5 to 0.65 mL Tubes, Pk. 1,000	25.00
6263R49	TOUGH-TAGS, Green, For 1.5 to 2.0 mL Tubes, Pk. 1,000	25.00

Sidewall Tough Tags

6263R52

- Slender, pre-cut labels fit on side of microtiter plates, petri dishes and other containers
- Dimensions: 0.25" x 1.5"

6263R52 TOUGH-TAGS, Sidewall, Pk. 1,000 \$30.00

Laser Tough Tags

6263R55

- Specially designed sheets readily accept laser printing
- Heat-resistant, stay-flat sheets will not jam in printer
- Available in four label sizes

6263R55	TOUGH-TAGS, Laser, 1.5" x 0.75", 1,000 Labels	\$50.00
6263R58	TOUGH-TAGS, Laser, 1.25" x 0.5", 2,016 Labels	60.00
6263R61	TOUGH-TAGS, Laser, 0.94" x 0.5", 2,016 Labels	60.00
6263R64	TOUGH-TAGS, Laser, 0.75" x 0.75", 2,400 Labels	60.00

NALGE

PRESSURE SENSITIVE LABELS

Nalgene® PolyPaper®

- Nalge 6309
- These die-cut labels have rounded corners and a special adhesive backing which adheres well to plastics, glass or metals
- Resistant to chemicals, water, aging and mildew
- 6265B15 and B17 are excellent for labeling microscope slides
- Attached to waxed-paper sheets in several rows, convenient for typewriter marking



6265B15

6265B15	LABEL, $\frac{1}{2}$ " x $\frac{1}{2}$ ", Pk. 600	.....	\$24.35
6265B17	LABEL, $\frac{1}{2}$ " x $\frac{1}{2}$ ", Pk. 6,000	.....	243.47
6265B25	LABEL, $\frac{1}{2}$ " x $1\frac{1}{2}$ ", Pk. 400	.....	17.87
6265B27	LABEL, $\frac{1}{2}$ " x $1\frac{1}{2}$ ", Cs. 4,000	.....	179.72
6265B35	LABEL, 1" x 2", Pk. 240	.....	17.28
6265B37	LABEL, 1" x 2", Cs. 2,400	.....	172.03
6265B45	LABEL, 1 $\frac{1}{2}$ " x 3", Pk. 120	.....	17.62
6265B47	LABEL, 1 $\frac{1}{2}$ " x 3", Cs. 1,200	.....	176.21
6265B60	LABEL, 2" x 4", Pk. 60	.....	17.62
6265B62	LABEL, 2" x 4", Cs. 600	.....	176.21

NALGE

CRYOWARE LABELS

- Durable cloth labels are specifically designed for use at cryogenic temperatures
- Adhere to plastic and cardboard cryogenic storage boxes
- Will not peel or shrink, even upon removal from mechanical or liquid-nitrogen freezers
- Ten sheets of plain labels



6265F02

Labels measure 25 x 50 mm (1" x 2"); twenty labels per sheet.

6265F02	LABELS, Plain, Pk. 200	.....	\$20.31
6265F04	LABELS, Plain, Cs. 2,000	.....	203.12



PRESSURE SENSITIVE SATIN CLOTH LABELS

- Rectangular, with rounded corners
- Durable white satin cloth resists tearing
- Withstand extremely cold temperatures
- Suitable for use in cryogenic work
- Resistant to acids, bases, oils, greases, salt water and soap
- Adhere securely to smooth, clean, nonporous surfaces; peel off easily
- Accept pencil, ball point pen or felt tip marker



6265E10

Labels are attached individually to waxed-paper sheets from which they can be easily peeled. Each sheet contains several rows, convenient for typewriter marking.

6265E10	LABEL, $\frac{1}{2}$ " x 1 inch, Pk. 1,000	.....	\$40.00
6265E20	LABEL, $\frac{1}{2}$ " x 2 inches, Pk. 1,000	.....	40.00

RADIOACTIVE INDICATOR DOTS

Identify "hot" microsample tubes and other vessels

- Supplied on a tape roll
- Color coding complies with OSHA regulations



6269F21

Dots are $\frac{1}{8}$ " (6.35 mm) in diameter with the radiation symbol on a yellow background. Stick on polypropylene microcentrifuge tubes for quick identification of "hot" tubes.

6269F21	RADIOACTIVE INDICATOR DOTS, 1,000/roll	\$22.98
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Thomas Tips

Using the Right Marker

Labels that withstand extreme temperatures and harsh chemical environments have application temperatures that are usually above freezing and require a clean dry sample container. Be sure that the marker used on the label and the adhesive securing the label is not solubilized or degraded by the substances used in the environment that you intend to place the sample container.

SPECIALTY WARNING LABELS

Biohazard and Radioactive Warning Labels

- Self-adhesive for easy application
- Universally recognized Biohazard and Radiation symbols
- Use to identify equipment, containers, rooms, materials, experimental animals or anything that contains or is contaminated by viable hazardous or radioactive reagents

Bold graphics make these labels virtually impossible to miss. Stick tightly to any surface, will stay in place as long as needed.

Biohazard Labels



Biohazard symbol and lettering are black lettering and symbol on a fluorescent orange background, mandated by OSHA. 6268H22 Label is 57 x 73 mm; supplied pre-cut, on waxed backing, in continuous rolls of

6268H22

1,000 labels. 6268H25 Label is 57 x 90 mm and in waxed paper backed in packages of 100 labels.

6268H22	LABEL, Biohazard, Rf. 500	.....	\$10.85
6268H25	LABEL, Biohazard, Pk. 100	.....	38.25

Radioactive Labels



6268H35

Radiation symbol and lettering are in red on yellow background. 6268H35 is 76 x 25 mm; supplied uncut in rolls containing 170 label imprints on continuous strip of tape.

6268H35	LABEL, Radioactive, Rf. 170	\$10.96
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NALGENE

POLYPAPER® RIGHT-TO-KNOW LABELS

Improve laboratory safety with chemical-resistant, water-proof labels



6268V01

- Nalgene 6317 and 6316
- For safe storage of hazardous chemicals
- Pressure-sensitive labels incorporate Department of Transportation and National Fire Protection Association codes, symbols and pictorials of recommended safety equipment

Custom labels available (Thomas numbers 6268V01, V03); include 25 blank labels and pressure-sensitive stickers depicting N.F.P.A. codes and safety symbols.

Chemical-specific labels available (Thomas numbers 6268V05, V07); include 2 sets of 25 of the most common laboratory chemicals:

Acetic Acid	Isopropyl Alcohol	Acetone	Methanol	Acetonitrile
Methyl Ethyl Ketone	Chloroform	Methylene Chloride	Dimethyl Sulfoxide	Nitric Acid
Ethyl Alcohol	Perchloric Acid	Ethyl Ether	Potassium Hydroxide	Ethyl Acetate
Sodium Hydroxide	Formic Acid	Sodium Hypochlorite	Formaldehyde	Sulfuric Acid
Hexane	Toluene	Hydrochloric Acid	Xylene	Hydrogen Peroxide

6268V01	LABELS, Custom, Pk. 25	.....	\$74.50
6268V03	LABELS, Custom, Cr. 150	.....	445.94
6268V05	LABELS, Preprinted, Pk. 50	.....	75.79
6268V07	LABELS, Preprinted, Cr. 300	.....	454.73

NALGENE

TARGET ORGAN LABELS

Paper labels with protective mylar overlays



6268V12

- For supplemental labeling of chemical name, target organs and effects and route of entry of hazardous chemicals
- Label size: 51 x 76 mm (2" x 3")
- Mylar overlay size: 64 x 89 mm (2 1/2" x 3 1/2")

Use a permanent marker to enter information according to chemical MSDS. Labels comply with OSHA Hazard Communications standards for labeling containers holding hazardous materials. Each label includes a protective Mylar overlay that shields it from chemical attack.

Use with Nalgene Right-to-Know labels (Thomas numbers 6268V01 to V07).

6268V12	TARGET ORGAN LABELS, Pack 25	.....	\$6.55
6268V16	TARGET ORGAN LABELS, Case 150	.....	39.29

Thomas Scientific

BEL-ART

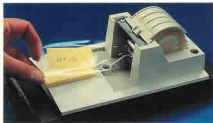
PROTECTIVE LABEL SYSTEM

Label and Cover System

- For preparing paper labels for application to smooth surfaces
- Adhesive-backed, clear polyester tape which completely covers the label
- Tape protects against damage or removal by many solvents
- Adheres to glass, metals and most plastics including polyethylene, polypropylene and Teflon®
- When properly applied, labels withstand temperatures from -196° to +120°C

Plastic tape dispenser has writing platform which holds pad of 100 labels. When paper label has been marked, protective tape is pulled out, smoothed over top of label, lifted to remove label from pad, then severed on perforated tear bar and applied directly to surface, enclosing label under protective film. When preparing labels for objects to be submerged in water or autoclaved, it is recommended that a water-resistant writing utensil, such as a ball point pen, lead pencil or solvent-based ink pen, be used and that tape used be 1" wider than label.

Dispenser



6269A05

- High strength ABS plastic
- Steel serrated cutting blade
- For use with paper labels and protective tape (Thomas numbers 6269A12 through D27)

Protective tape fits on aluminum roller for smooth dispensing and is held in place by a spring loader cover.

6269A05 DISPENSER, Labeling \$32.75

Paper Labels

- 100 labels/pad;
10 pads/box
- Accepts any kind of marker
- For use with 6269A05 Dispenser.



6269A12

6269B12

Size 1/2 x 1 1/2 inches

6269A12	LABEL, White, Cl. 1,000	\$14.00
6269B14	LABEL, White, Co. 12 x 1,000	102.00

Size 1 x 3 inches

6269B12	LABEL, White, Cl. 1,000	\$15.00
6269B14	LABEL, White, Co. 12 x 1,000	102.00

Size 1 1/2 x 3 inches

6269C12	LABEL, White, Cl. 1,000	\$16.00
6269C10	LABEL, White, Co. 12 x 1,000	102.00

Protective Tape

- Clear polyester tape with self-adhesive backing
- Rolls are on 1" core and fit interchangeably in 6269A05 Dispenser
- Adhesive residue can be easily removed with acetone, methyl ethyl ketone, heptane or naphtha
- Rolls are 36 yds. (32.9 meters) long



6269D13

LABELS

Tape Width:	1 inch	1 1/2 inch	2 inch
Fit Label Size, inches	1/2 x 1 1/2	1 x 3	1 1/2 x 3
Rolls Needed per 1,000 Labels:	2	3	3

Tests show that label and tape remain affixed with no discoloration after being autoclaved for 40 minutes at 125°C or after 10 weeks in liquid nitrogen at -196°C.

6269D13	TAPE, 1 in. Roll	\$10.00
6269D20	TAPE, 1 1/2 in. Roll	16.00
6269D27	TAPE, 2 in. Roll	20.25



Thomas Tips

Label and Marker Ink

Be sure your marker is suited for the environment you expect to expose it to. Just because the label can withstand the heat, cold or humidity does not mean the ink will not run.

LABEL-OFF™ LABEL REMOVER*Softens label adhesive for faster cleanup*

- Removes labels quickly and easily
- Allows reuse of bottles and containers
- Spray on, wipe off

Kit contains 2 oz. (59 mL) of label adhesive solvent in pump type bottle and 20 lint-free wipes, 4" x 4" (102 mm).

6269E05

6269E05 LABEL REMOVER KIT \$16.00

BROTHER**PT-15 ELECTRONIC LABELER***Makes professional labels easily and quickly*

6271C08

- Auto-repeat printing
- 49-key English and Spanish keyboard
- 500 character memory

The Brother P-touch creates laminated adhesive backed labels for home, office or commercial use. Six character LCD allows you to proofread and edit errors before printing out final version. The memory allows frequently used material to be stored and recalled for future use. Features special high performance text and graphics capabilities, such as different print sizes and styles, auto underlining, framing and mirror printing and it prints various built-in symbols. Uses TC style replacement tapes.

6271C08 ELECTRONIC LABELING SYSTEM \$246.00

BROTHER**REPLACEMENT TAPES***TC Style Replacement Tapes for PT-10, PT-12 and PT-15 Labelers*

- Wide variety of colors
- Adhesive, transfer and iron-on varieties
- 25 foot rolls

NOTE: more color combinations are available. Call Customer Service for more information.

6271C20

6271C20	1/2" Black On White, Pl. 2	..... \$36.15
6271C21	1/2" Black On Clear, Pl. 2	..... 36.20
6271C27	1/2" Black On Yellow, Ea.	..... 17.95
6271C30	1/2" Black On Red, Ea.	..... 20.00
6271C31	1/2" Black On Green, Ea.	..... 19.05
6271C41	1/2" TRANSFER LETTERING TAPE, Black, Pl. 2	..... 37.25

BROTHER**PT-2210 ELECTRONIC LABELING SYSTEM***Create laminated adhesive-backed labels for virtually any commercial application*

6271D57

- Standard typewriter-style keyboard
- LCD: 12 character x 2 lines
- Prints vertically and horizontally
- Text underlining and framing
- Auto numbering and repeat printing

The PT-2210 creates professional-quality adhesive-backed labels that can be used for virtually any deluxe application. This labeling system uses durable, laminated "TZ" labeling tapes that are available in a wide variety of color combinations and 4 different widths. Each label adheres to practically any surface, withstands temperature changes (from microwaves to freezers) and is water-resistant. These labels are ideal for identifying folders, computer disks, lab equipment, computer hardware and more.

The PT-2210 is easy to use. It's also loaded with useful features, including 4 built-in fonts, 8 type styles, 7 type sizes, vertical and mirror printing and 5-line printing (up to 48 points). This model comes complete with a protective carrying case, 1 "TZ" 1/2" black on white tape, user's manual, auto tape cutter, tape separator and AC adapter. Perfect for all your professional needs.

6271D57 ELECTRONIC LABELER, PT-2210 \$325.00

Thomas Scientific

BROTHER

REPLACEMENT TAPES

T2 Replacement Tapes for PT-2210 Labelers



6271060 series

Labels also fit older PT-340 and PT-350 labelers.

THOMAS NO.	TAPE MODEL	SIZE	PRICE
BLACK/CLEAR TAPES			
6271060	T2111	1/4"	\$13.45
6271065	T2121	3/8"	15.90
6271070	T2131	1/2"	19.00
6271075	T2141	3/4"	22.25
BLACK/WHITE TAPES			
6271080	T2211	1/4"	\$15.90
6271085	T2221	3/8"	18.00
6271090	T2231	1/2"	19.05
6271095	T2241	3/4"	22.10
RED/WHITE TAPES			
6271091	T2232	1/2"	\$19.05
6271093	T2242	3/4"	21.70
BLUE/WHITE TAPE			
6271E10	T2243	3/4"	\$21.75
WHITE/BLACK TAPES			
6271E15	T2315	1/4"	\$18.65
6271E20	T2325	3/8"	19.70
6271E25	T2335	1/2"	21.70
6271E30	T2345	3/4"	24.80
6271E35	T2545	3/4"	24.80

Accessories for PT-2210 Labeler



6271E40



6271E90

6271E40	REPLACEMENT CUTTER BLADE	\$10.35
6271E90	AC ADAPTER	23.85

CRAMER

LADDERS

Stop-Step Safety Ladder



6275A20

- Mounted on four spring-loaded, ball-bearing casters which retract when weight is applied, compressing friction rims on 102 mm diameter steel, dome-shaped feet against floor for securing

Three cross-braced steps are heavy gauge aluminum, 406 mm wide x 203 mm deep, with ribbed rubber treads; step height 229 mm. Trussed frames and braces are 25 mm square, welded-aluminum tubing with baked enamel finish. Meets OSHA requirements. Overall 533 x 675 x 806 mm high; top step 686 mm high.

6275A20 LADDER, Three-Step.....\$446.00

All-Steel Folding Ladder



6275A25

- Three perforated steps provide firm and dependable footing
- Unique folding mechanism allows for easy storage and transportation

2" soft casters retract when weight is applied. Dimensions: 19 1/4" W x 9 1/4" D x 32 1/2" H.

6275A25 LADDER, Steel Folding.....\$289.00

BEL-ART

DIPPERS

Short-Handled Dipper

- Rigid, linear polyethylene beaker
- 600 mL (20 1/4 ounces) capacity
- With pouring spout



6277865

Handle is heat welded to side of beaker at approximately 30° angle. Handle length is 250 mm.

6277865	LADLE, 600 mL.....	\$18.25
6277867	LADLE, 600 mL, Ds. 12.....	106.00

Polarware One-Piece Ladles



6277K01

- Completely sanitary and seamless
- Constructed from 18-8, 304 stainless steel
- Extra strong for greater durability

6277K01	9-oz. Ladle.....	\$7.40
6277K04	1-oz. Ladle.....	\$4.40
6277K07	1-1/2-oz. Ladle.....	9.00
6277K10	2-oz. Ladle.....	10.10
6277K13	3-oz. Ladle.....	11.90
6277K16	4-oz. Ladle.....	12.80
6277K19	6-oz. Ladle.....	13.60
6277K22	8-oz. Ladle.....	16.00
6277K25	12-oz. Ladle.....	17.10

BEL-ART

LADLES/DIPPERS

Long-handled, High-Density Polyethylene Dippers



6277K30

- For easy sampling from tanks, vats, lakes, etc., these dippers will not contaminate solutions or corrode
- Consist of 475 mL higher density polyethylene beaker with small pouring spout and hollow polyethylene handle

- Beaker is 100 mm high x 100 mm o.d.
- 11 1/2" (29 mm) handle is welded to the rigid bowl at a 45° angle
- 12 ft. handle is available in one-piece or two-piece (on special order)
- Solid insert at end of handle has hole for hanging

6277K30	LADLE, 3 ft. (891 mm)	\$29.95
6277K35	LADLE, 6 ft. (1.83 m)	35.25

POLARWARE

GRADUATED DIPPER

32 oz. capacity



6277K45

- Graduations
- 12 1/2 inch handle length
- Stainless steel

A capacity of almost 1 liter and foot long handle to handle your biggest sampling chores.

6277K45	32 oz. 12-1/2" L. Graduated Dipper	\$23.20
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POLARWARE

COLOR-CODED STAINLESS STEEL ONE-PIECE LADLES

Ladies with solid or perforated bowls



6277K48

- Stamped from 18-8 stainless steel
- No seam to collect food or contaminants
- Color-coded handles for easy identification

Thumb grip for comfort and a non-slip stopper to keep it on the edge of the pan. Available with solid bowls for liquid samples or perforated bowls for draining.

Ladies with Solid Bowls

6277K46	2 oz. Red Solid Bowl	\$10.00
6277K48	3 oz. Ivory Solid Bowl	10.30
6277K51	4 oz. Green Solid Bowl	11.20
6277K54	6 oz. Black Solid Bowl	12.70
6277K57	8 oz. Blue Solid Bowl	14.00

Ladies with Perforated Bowls

6277K65	2 oz. Red Perforated Bowl	\$10.00
6277K68	3 oz. Ivory Perforated Bowl	10.30
6277K71	4 oz. Green Perforated Bowl	11.20
6277K74	6 oz. Black Perforated Bowl	12.70
6277K77	8 oz. Blue Perforated Bowl	14.00

PLAS LABS

UV (DNA) CHAMBER

Specifically designed to help improve the accuracy of DNA and general tissue culture procedures



6278A05

- Reduced risk of air-borne contamination during DNA sequencing
- Automatic power shut-off for safety (when doors are removed)
- Removable main housing and top

Chamber is a "still air enclosure", containing both fluorescent and UV germicidal lamps. The UV system is rated at 254 nm and will decontaminate all surfaces of the interior. The 13 mm thick optically clear front viewing panel is extremely effective for protection against ³²P labeled compounds and Beta Rays. The side access panels are removable and have "twist-and-turn" locks.

Includes two bright white acrylic shelves (8" x 23"). Power requirements: 100-115 V, 60 Hz. System has a two Amp circuit breaker. Sides and back wall are one piece, formed of .375 thick acrylic for long-term rigidity, durability and protection.

Dimensions: o.d.: 24" W x 18" D x 28" H; i.d.: 23.5" W x 17" D x 21" H. Includes a one-year warranty.

6278A05	DNA CHAMBER	\$2,185.00
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Let us quote your next order!



Our trained telephone representatives can help you select the products you need and provide a competitive price quote. We can suggest the best buying quantities for maximum savings. Our experienced quotations staff has immediate access to over 250,000 competitively-priced instruments, supplies and reagents.

LABNET

F2000 GENESPHERE

Portable Class 100 Workspace



6278R06

- Meets U.S. Federal Standard 209D: Class 100 for air cleanliness
- Contains 0.3 micron HEPA filter

Genesphere removes the need for separate laboratories, as experiments can be conducted side by side. Bubble is made of thermoformed acrylic (ICI), and the base is constructed of polyurethane structural foam (Bayer). A manual or automatically controlled ultraviolet irradiation "purge" mode bathes the chamber in UV light, destroying 99.99% of any contaminating DNA molecules. Within five minutes, a "ready" light indicates a Class 100 clean air environment has been reached; the spherical shape and positive pressure system guarantees that there are no contaminated air pockets. Timer is 24 hour digital LCD with 4 on/off operations per day, with manual override. Filter is self-monitoring and sounds an alarm when it needs to be replaced. Filter cassette provides up to 700 hours of Class 100 air (under normal laboratory conditions). Three 6 W low-pressure mercury vapor 253.7 nm germicidal lamps provide UV light. Dimensions (L x W x H, cm): 64 x 62 x 12. Volume: 0.137 m³.

6278R06	GENESPHERE, 110 V, 50/60 Hz	\$3,500.00
6278R12	REPLACEMENT HEPA FILTER	95.00
6278R13	REPLACEMENT PREFILTER	30.00
6278R16	REPLACEMENT LIGHT BULB	80.00
6278R19	DUST COVER	75.00
6278R22	DIFFUSING PLATE	18.00
6278R25	REPLACEMENT BOTTOM DOME, 19mm	440.00
6278R28	WORKSPACE EXTENDER	1,050.00
6278R31	QUICK RELEASE BAND	90.00
6278R34	STOPPERS, Part Cover (2)	25.00
6278R37	REPLACEMENT UV LIGHT SOURCE	225.00

LABCONCO

PURIFIER™ TRACE METALS WORK STATION

Vertical laminar flow

- Contaminated air is exhausted to the outside
- 99.99% efficient HEPA filter
- Particle-free Class 100 air
- Two variable speed blowers with solid state speed control

This bench offers a work area for applications such as trace metal analysis of environmental samples that require metal-free Class 100 conditions. Also suitable when Class 100 clean room conditions are necessary while working with corrosive acids and alkalis. During operation, room air is drawn through a pre-filter in the top of the cabinet to trap large particles and then flows through the HEPA filter. The air is then projected vertically providing a particulate-free work area. All components in air stream path are constructed of non-metallic compounds to guard against metal exposure. The operator is protected from material inside the enclosure by an inflow of air through the face of the clean bench. All contaminated air is exhausted to the outside via duct work and a remote blower.



6278C30

6278B50	PURIFIER CLEAN BENCH, 3'	96,750.00
6278B52	HEPA FILTER	375.00
6278B54	PRE-FILTER	31.25

EACI

BENCHTOP ENVIRONMENTAL AIR CONTROL

- Provide horizontal laminar flow of Class 100 air; flow rate 40 to 100 fpm (0.2 to 0.6 m/s)
- With solid state speed control, permanently lubricated, 1/3 hp (249 W) motor which is internally protected against thermal overload and balanced, direct drive blower
- Meet Federal Standard 209-B
- Prefilter is polyurethane foam; HEPA (high efficiency particulate air) type final filter removes particulates 0.3 micrometer and larger with 99.99% efficiency
- Overall contamination is less than 50 particles per cubic foot, size 0.5 µm and larger



6278C15

Blower assembly is mounted on rubber vibration dampeners. Aluminum and polyurethane finish; side panels are 6 mm thick, clear methyl methacrylate plastic; work surface is non-glare white Formica™. Includes fluorescent light which provides 150 foot candles (1814 lux) at work surface. With 3-wire cord and plug for 120 volts, 60 Hz, 6.8 amperes.

THOMAS NO.	BLOWER CAPACITY AT 100 fpm	CHAMBER W x D x H, mm	OVERALL W x D x H, mm	PRICE
6278C15	730 cfm	927 x 616 x 775	966 x 965 x 1194	\$3,057.00
6278C30	1600 cfm	1232 x 610 x 775	1273 x 965 x 1194	3,197.00

EACI

LAMINAR FLOW STATION*A compact, self-contained, multipurpose laminar flow module*

6278F15

- Class 100 (Federal Standard 209B) environment utilizing an aerosol challenged HEPA filter
- Easy conversion to either horizontal or vertical configuration
- Welded metal cabinet with a polyurethane enamel, corrosion-resistant finish
- Quiet operation

Perforated aluminum diffuser screen protects the HEPA filter, while maintaining the uniform air velocity within the work area. High efficiency particulate air filter (HEPA type), has a minimum efficiency of 99.99% at 0.3 micron, aerosol challenged (zero probed). Washable type prefilter is made of polyurethane foam; 40% NBS Atmospheric Dust Test. Air flow is 90 feet per minute, $\pm 20\%$ average velocity, 6 inches from diffuser screen. The direct drive, continuous duty 1/8 h.p. motor/blower assembly with sealed-for-life bearings and inherent overload protection is electronically balanced (dynamically) and mounted on vibration-dampening rubber mounts. Motor/Blower assembly is designed to provide rated airflow through a 50% increase in static pressure.

Includes removable $\frac{1}{8}$ " clear acrylic front, rear and side panels. Easy field conversion from vertical to horizontal flow configuration. Power Cord: Standard 15 amp, 115 V, single phase, 60 Hz rubber-covered cord with 3-prong grounded plug. Overall dimensions 615 x 615 x 1260 mm vertical flow; 615 x 962 x 905 mm for horizontal flow. A fluorescent lighting fixture providing 150-foot candles at the work surface is available on special order.

LAMINAR FLOW STATION

THOMAS NO.	CHAMBER DIMENSIONS (mm)	AVERAGE CFM @ 90 FPM	BTU/HR.	POWER REQUIREMENT AT 115 V	PRICE
6278F15	610 x 610 x 610	390	1500	3.8	\$2,015.00

Fume Hoods

Thomas carries a full line of fume hoods. Models range from full-sized hoods to portable bench top models. Hoods are available that are made of steel, fiberglass or other composite materials for chemical and fire resistance. Manufacturer's include Labconco and Hemco. Base cabinets are available for storing acids and flammable materials.

See Thomas numbers beginning with 5160A01 for more information.

Thomas Scientific

EACI

ENVIRALAB® STERILITY MODULE**Enviralab Benchtop Environmental Air Control Sterility Modules**

- Provide vertical laminar flow of Class 100 air
- Solid state speed control provides average flow rate of 90 fpm 10 fpm measured 152 mm from diffuser screen
- Blower has direct-drive, continuous duty and permanently lubricated motor, which is internally protected against thermal overload
- Built-in, shielded ultraviolet lamp can be used to sterilize work surface when Class 100 conditions are not required
- Prefilter is disposable polyester and anodized aluminum diffuser screen protects HEPA type final filter, which removes particulates as small as 0.3 microns with 99.99% efficiency
- Noise level 65 dba ambient

Stainless steel work chamber has full-width, horizontal support at top and two capped, grounded receptacles which take standard NEMA style 5-15 plug for 120 volts, 60 Hz. Recessed fluorescent lighting provides 100 foot candles (1076 lux) at work surface; ultraviolet lamp is inoperable when fluorescent lighting is in use. Front control panel has separate light and blower switches, air flow speed control level and color-keyed air velocity indicator gauge. Housing is welded steel with polyurethane enamel finish.

With 3-wire cord and plug for 120 volts, 60 Hz; 15 amperes; CSA approved.

WARNING: short wave ultraviolet radiation is destructive to the eyes and can severely burn the skin, even on short exposure.

EACI Stands

- For use with EACI Enviralab Sterility Modules
- Depth 0.82 meters; height 0.84 meters; width for 6278J70 is 1.19 m, for 6278J80 is 1.78 m



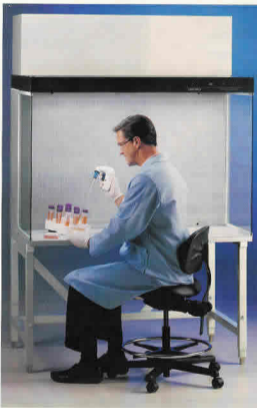
6278J20

ENVIRALAB BENCHTOP ENVIRONMENTAL AIR CONTROL LAMINAR FLOW STATIONS

THOMAS NO.	EACI MODEL	BLOWER CAPACITY AT 90 fpm	BLOWER MOTOR	CHAMBER W x D x H, mm	OVERALL W x D x H, mm	CURRENT REQUIREMENT	PRICE
6278J20	ESM-4	730 cfm	1/3 hp	1130 x 664 x 711	1190 x 820 x 1370	3 A	\$4,355.00
6278J36	ESM-6	1060 cfm	1/2 hp	1715 x 664 x 711	1780 x 820 x 1370	10 A	5,171.00
6278J76	STAND FOR 6278J20						649.00
6278J80	STAND FOR 6278J30						851.00

LABCONCO

PURIFIER HORIZONTAL CLEAN BENCH



6278Y10

- ETL listed
- Produce horizontal laminar flow of Class 100 air
- Solid state speed control provides flow rate of 90 fpm
- Variable-speed motor internally protected against thermal overload
- Meet Federal Standard 209e
- Dacron prefilter; HEPA-type final filter removes 99.99% of all particles 0.3 microns in size
- Easily accessible final filter can be changed in minutes
- Plastic laminate work surface
- Deep work surface area
- Two fluorescent lights mounted at top of chamber

Of epoxy-coated steel; side panels of $\frac{1}{2}$ " tempered safety glass. With 115-volt polarized and grounded electrical receptacle at top front of canopy; 6278Y30 has two receptacles. Front panel controls include on-off switches for blower and fluorescent lights and 2-light filter condition indicator. Shown mounted on Base Stand (not included, order Thomas number 0516F30). With 3-wire cord and plug for 120 volts, 60 Hz; amperes vary by size.

The Purifier Clean Bench is the work station of choice with materials that do not generate harmful aerosols or vapors, but that do require a particulate-free environment.

During operation, room air is drawn through a pre-filter in the top of the cabinet to trap large particles. The air then flows through a 99.99% efficient HEPA filter and is projected horizontally out across the entire work surface area. This HEPA-filtered air prevents contamination from entering the work area and provides a particulate-free work environment which minimizes cross-contamination.

The Clean Bench's deep work surface area provides ample space for such varied applications as tissue culture research, media preparation, electronic part inspection, syringe filling and parenteral admixture preparation.

NOTE: because air from the work area is dispersed directly into the laboratory, Purifier Clean Benches should never be used in conjunction with biohazardous material, toxins or radionuclides. You and your safety officer must carefully assess the risk associated with any operation performed in a clean bench.

LAMINAR FLOW STATIONS

THOMAS NO.	DIMENSIONS, CHAMBER (in.)	OVERALL DIMENSIONS W x D x H, in.	MOTOR RATING	SHIPPING WEIGHT (lbs.)	PRICE
6278Y10	27 $\frac{1}{2}$ x 19 x 31	38 $\frac{1}{2}$ x 33 $\frac{1}{2}$ x 51	$\frac{1}{2}$ hp	344	\$4,200.00
6278Y20	48 $\frac{1}{2}$ x 19 x 32 $\frac{1}{2}$	50 $\frac{1}{2}$ x 33 $\frac{1}{2}$ x 51	$\frac{1}{2}$ hp	382	6,335.00
6278Y30	73 $\frac{1}{2}$ x 19 x 32	74 $\frac{1}{2}$ x 33 $\frac{1}{2}$ x 51	2- $\frac{1}{2}$ hp	514	7,455.00

Thomas Scientific

LABCONCO

PURIFIER FORENSIC ENCLOSURE*For examining and processing forensic evidence*

- Exhausts odors and chemical fumes
- Protects from hazardous materials
- Isolates and protects evidence

This total exhaust vertical clean bench provides particulate-free (Class 100) air to protect material from contamination and exhausts to the outside to protect the user from odors and chemical fumes. During operation, two built-in blowers draw room air through a prefilter at the top of the cabinet and then through a 99.99% efficient HEPA filter. Class 100 particulate-free air is then projected vertically across the work area. Air is captured in grills at the front and back of the cabinet and exhausted to the outside, using ductwork and a remote blower. The worker is protected from chemicals and materials inside the enclosure by the inflow of air at the face of the cabinet. Average downflow velocity is 60 fpm; average inflow velocity is 80 fpm; exhaust volume is 488 cfm. The filter indicator on the control panel monitors differential pressure across the HEPA filter. A green light indicates normal operation; an amber light alerts the operator that service is required. The front sash and side panels are made of scratch-resistant laminated safety glass. The angled front sash tilts up for easy loading and cleaning and pivots down to the operating position of 9 inches.

All components within the air stream, including the air foil, interior top, back and work surface, are constructed of non-metallic, acid and chemical resistant PVC. The work surface may be lifted out for cleaning. Glare-free fluorescent lighting is located outside the work area. Light and blower switches are located on front of cabinet. ETL and ETL-C listed. Dimensions (W x D x H): 35 $\frac{1}{2}$ " x 33 $\frac{1}{2}$ " x 38" high.

6278Y36	PURIFIER FORENSIC ENCLOSURE	\$6,750.00
6278Y37	BACKDRAFT DAMPER & DUCT	255.00

LABCONCO

PURIFIER 100 CHEMICAL STATION*For use in the production/critical environments*

- PVC interior resists corrosive chemicals and solvents
- HEPA filter creates Class 100 work environment
- Vertical laminar air flow ensures user and product protection

This total exhaust vertical clean bench combines the corrosion resistance of PVC with HEPA filtered laminar air flow to achieve optimal work conditions to process electronic components, medical devices and other materials which require particulate-free handling. During operation, two built-in blowers draw room air through a prefilter at the top of the cabinet and then through a 99.99% efficient HEPA filter. Class 100 particulate-free air is then projected vertically across the work area. Air is captured in grills at the front and back of the cabinet and exhausted to the outside, using ductwork and a remote blower. The worker is protected from chemicals and materials inside the enclosure by the inflow of air at the face of the cabinet. Average downflow velocity is 60 fpm; average inflow velocity is 80 fpm; exhaust volume is 488 cfm. The filter indicator on the control panel monitors differential pressure across the HEPA filter. A green light indicates normal operation; an amber light alerts the operator that service is required.

The front sash and side panels are made of scratch-resistant laminated safety glass. The angled front sash tilts up for easy loading and cleaning and pivots down to the operating position of 9 inches. The work surface may be lifted out for cleaning. Glare-free fluorescent lighting is located outside the work area. Light and blower switches are located on front of cabinets. ETL and ETL-C listed. Dimensions (W x D x H): 35 $\frac{1}{2}$ " x 33 $\frac{1}{2}$ " x 38" high.

6278Y40	PURIFIER 100 CHEM STATION	\$6,750.00
6278Y42	REMOTE BLOWER	1,955.00

ENVIRCO

BIOLOGICAL SAFETY CABINETS

Class II Type A or B₂ cabinets are listed under NSF standard 49 for personnel and product protection



6279AD1

- Suitable for Biosafety Levels 1, 2 and 3 per CDC/NIH and NRC criteria
- Permits preparation of chemotherapeutic drugs per OSHA requirements
- Provides an engineering control for OSHA's Bloodborne Pathogens Standard

Type A cabinets exhaust into the room. Type B₂ cabinets exhaust to external ventilation. Both types provide a Class 100 work area per federal standard 209. The special vertical airflow pattern with front to back split protects against cross contamination within the work area. An audible alarm system alerts the user when cabinet airflow has reached proper operating parameters, motor/blower failure or an exhaust blockage. A magnetic differential pressure gauge monitors HEPA filter loading.

The hinged and angled safety view screen allows close-up views of the cabinet interior while reducing operator neck and back fatigue. An 8" fixed opening assures proper height placement and guarantees containment. The one piece, heavy gauge, stainless steel workdeck minimizes vibration.

Cabinets are equipped with one service fixture suitable for air, gas or vacuum and one duplex electrical outlet with drip proof covers and separate breaker switch. Additional fixtures are available, see 6279A37. Optional UV light (Thomas number 6279A31) plugs into a cabinet's electrical outlet and is designed to prevent cabinet use while it is operating, protecting the operator from unnecessary UV exposure.

On site certification is provided and the two year manufacturer's warranty covers parts and labor. Power requirements: 115 V, 60 Hz. Available in 220 V/50 or 60 Hz on special order.

BIOLOGICAL SAFETY CABINETS

THOMAS NO.	MFR. NO.	UNIT	DESCRIPTION	DIMENSIONS H x W x D in./cm
6279A01	10448	47in. Basic Unit (A)	Type A/B ₂ 1/2HP, 1600rpm Motor	57" x 31" x 29" (157.48 x 119.38 x 82.55)
6279A05	10276	70in. Basic Unit (B)	Type A Two 1/2HP, 1600rpm Motors	57" x 51" x 29" (157.48 x 177.80 x 82.55)
6279A10	10449	70in. Basic Unit	Type B ₂ Two 1/2HP, 1600rpm Motors	57" x 51" x 29" (157.48 x 177.80 x 82.55)
6279A13	10275	Base/Stand for 4' unit	All steel Polyurethane enamel finish	28" x 31" x 29" (81.28 x 119.38 x 82.55)
6279A16	10277	Base/Stand for 6' unit	All steel Polyurethane enamel finish	28" x 51" x 29" (81.28 x 177.80 x 82.55)
6279A19	10686	Transition Collar for 4'	Convert Type A to Type B ₂	14" W x 29" D to a 10" Round Collar
6279A22	10687	Transition Collar for 6'	Convert Type A to Type B ₂	28" W x 29" D to a 10" Round Collar
6279A25	88721	IV Bar, 4'	Stainless steel rod 5" Hooks	1" dia/ (3.18cm dia.)
6279A28	88722	IV Bar, 6'	Stainless steel rod 5" Hooks	1" dia/ (3.18cm dia.)
6279A31	22557	UV Lamp ACC	Light tube with stainless steel reflector shield, 253.7 nm output fits either model cabinet	—
6279A34	10652	Electrical Duplex Outlet	Additional outlet (Duplex)	—
6279A37	10653	Air, Gas, Vacuum Labeled	Additional service fixture (Gas, Air or Vacuum)	—

FLUORESCENT LIGHT BOXES

Portable Lighted Tracing Board



6280F50

- Replaces the old-fashioned, costly light table
- Stainless steel frame
- Top made of opal acrylic plastic, which is shatterproof and provides maximum light diffusion with minimum glare
- Flush top allows use with materials that are larger than unit
- Warm surface helps dry ink or film, yet fluorescent light prevents overheating
- Low height convenient for use on desk tops or lab tables
- Completely flat top allows use of a straight edge or items larger than box itself
- Stores in an upright position to save space

Includes non-slip rubber feet, standard 18", cool white fluorescent lamps and 8 foot, 3-wire cord and plug for 115 V, 60 Hz.

6280F50	LIGHT BOX, 2-Lamp (15 W ea.), 11 x 16 in., 30 W.....	\$175.00
6280F60	LIGHT BOX, 4-Lamp (15 W ea.), 16 x 16 in., 60 W.....	237.00
6280F70	LIGHT BOX, 4-Lamp (20 W ea.), 16 x 24 in., 80 W.....	260.00

ILLUMINATOR LAMPS

General Purpose Illuminator



6281C50

- With 100 watt white light source
- Swivel-mounted arm in shelf clamp, which can be attached to surfaces up to 57 mm thick
- Maximum extended height 1,143 mm; overall diameter of shade 171 mm

Includes one 100 watt lamp bulb with medium screw base and 3-wire cord and plug for 120 V.

6281C50	LAMP, General Purpose.....	\$158.00
6281C52	WEIGHTED BASE.....	70.00
6281C59	LAMP BULB, 60 W, 120 V, Pk. 6.....	17.80

Dual Purpose Illuminator

- Similar to 6281C50, but shade houses both a 60 W incandescent lamp bulb and 22 W circular fluorescent lamp tube, each with separate on-off switch; combined illumination simulates daylight
- Arm is swivel-mounted in shelf clamp
- Maximum extended height 1,143 mm
- Shade diameter 241 mm

Includes one 60 W lamp bulb, Thomas number 6281C59 and one 6281D42 fluorescent lamp tube, 22 W, circular, with 4-pin connector. With 3-wire cord and plug for 120 V.

6281D30	LAMP.....	\$220.00
6281D42	LAMP TUBE, Circular, 22 W.....	17.35

HALOGEN GOOSENECK LAMPS

For desk or bench use

- Concentrated 20 W halogen light source, mounted on flexible gooseneck
- Bulb is enclosed in vented, polycarbonate shade which has clear glass lens and aluminum flood reflector



6281F15 and F10

- Shade unscrews for changing bulb, lens or reflector
- Provide 700 fc (7500 lux) over a 250 mm diameter circle at a distance of 305 mm
- Steel-link gooseneck is 680 mm long with PVC sleeve 15 mm o.d.
- Transformer housing is polycarbonate 60 x 60 x 120 mm high and has rocker-type power switch and circuit breaker reset pushbutton
- 6281F10 Lamp has removable, enameled steel plate base 199 mm o.d.
- 6281F15 Lamp has removable, enameled steel C-clamp with 45 mm opening for attachment to bench or table top

With 3-wire cord and plug for 120 V, 50 or 60 Hz, 20 W. For replacement lamp bulb, see Thomas number 6281F55.

Both models can be furnished with 508 mm gooseneck or with magnetic base on special order.

6281F10	LAMP with Table Base.....	\$156.00
6281F15	LAMP with C-Clamp Base.....	152.00

GOOSENECK LAMP WITH MAGNIFIER



- Similar to 6218F10 Lamp, but with 102 mm diameter, 2 x magnifier attached to separate gooseneck 510 mm long, swivel-mounted in base so that magnifier can be swung in and out of work area without refocusing

With 3-wire cord and plug for 120 V, 50 or 60 Hz, 20 W. For replacement lamp bulb, see 6281F55.

6281F20	LAMP/MAGNIFIER	.....	\$328.00
6281F55	LAMP BULB, 120 V, 20 W	.....	6.40

6281F20

MULTIPURPOSE WHITE/UV LAMP

Raymaster® Desk Type Multipurpose Lamps



- Adjustable single tube rectangular reflector
- Supplies long and short wave ultraviolet radiation
- White light and fluorescent daylight illumination for experimental purposes

Four types of tubular 8 watt glow discharge tubes, 305 mm long x 16 mm diameter, are offered. Lamp Tube Type A (6281K25) is germicidal. It provides short wave

6281K10

ultraviolet radiation principally at 254 nanometers with intensity of 17 micro watts per square centimeter at 1 meter. This is sufficient for effective air, surface and liquid disinfection.

Lamp Tube Type B (6281K32) provides long wave ultraviolet radiation, 360 nanometers. Tube is filtered to remove all but a trace of visible light; very effective for activating an extensive group of fluorescent materials. An accessory filter unit (6281K20) consisting of a 152 x 51 mm filter can be used with lamp tube type A.

The filter absorbs most visible light and transmits radiation principally at 253.7 nanometers, permitting the study of fluorescence effects. The Multipurpose Lamp (6281K10) comes complete with one each of tube types A, B, C and D; 6281K15 Lamp comes without tubes. Both models come with cord and plug for 105 to 125 volts, 60 Hz; 15 watts.

WARNING: this lamp tube emits powerful ultraviolet light. Eyes and skin should not be exposed to direct light.

6281K10	LAMP, Multipurpose	.....	\$248.00
6281K15	LAMP, Multipurpose, Without Tubes	.....	232.50
6281K20	REF. FILTER, UV	.....	230.00
6281K25	LAMP TUBE, Short Wavelength UV	.....	47.00
6281K32	LAMP TUBE, Long Wavelength UV	.....	25.50
6281K35	LAMP TUBE, White Light	.....	10.95
6281K40	LAMP TUBE, Daylight	.....	13.35



TITRATION LAMP

Fluorescent Daylight



6282F10

- Heavy gauge steel housing
- Characteristics similar to natural daylight
- Perfect for color, turbidity and flocculation tests

Large curved white reflector is designed so that the intensity of illumination over the entire surface does not vary more than 25%. Direct light is from the 15 watt bulb, while the 45 x 25 mm diameter fluorescent daylight tubes are shielded from direct viewing.

Housing has an enamel finish on the outside and is mounted on rubber feet. Illuminated window, 229 mm high x 470 mm long, is free from reflections of surrounding objects and forms an excellent standardized background for color and turbidity matching. For precipitation and flocculation tests, a sheet of black paper laid on the central part of the reflector gives a dark field effect. On/Off switch is located on top of housing.

Overall dimensions (mm): 470 L x 318 H x 148 D at bottom; 127 D at top. Power requirements: 120 V, 60 Hz.

6282F10	TITRATION LAMP	.....	\$724.00
6282F20	LAMP TUBE, 15 watt, 45 x 25 mm Diameter	13.50

4

Easy Ways to Order

Phone

800 345 2100
856 467 2000

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856 467 3087

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Thomas Scientific
P.O. Box 99
Sewelsboro, NJ 08085

Electronic

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* e-commerce
* EDI

Thomas Scientific

THERMOLYNE

BLOOD TYPING LAMP

Rh View Box



6282F00

- Rh slide temperature of 37° to 39°C reached in two minutes
- Built-in temperature indicator insures easy, accurate monitoring of viewing area
- An LCD thermal strip slide is also provided for convenient monitoring of slide temperature
- View box can be gently rocked by means of large knob on support cradle
- Extruded aluminum case is sturdy and easily kept clean
- Meets Rh slide test standards set by the AABB
- Provides excellent illumination of slide contents
- Temperature of viewing area can be adjusted easily to compensate for ambient temperature changes, (range 45° to 50 °C)
- Compact unit takes up minimum bench space

Soft, fluorescent, glare-free light provides uniform illumination. Light intensity is independent of temperature control.

With 3-wire cord and plug for 120 volts, 50 or 60 Hz; 30 watts. 6282F42 replacement lamp tube is rated at 6 watts. Overall dimensions 311 x 102 x 102 mm (13" x 4" x 4").

6282F00	LAMP, 120 Volt, 50/60 Hz.....	\$374.00
6282F42	LAMP TUBE, 6-Watt.....	13.50

UVP

HAND-HELD ULTRAVIOLET LAMPS

Multiband lamps incorporate both long and short wave UV tubes

- Medium-intensity, utilizing a 6 watt mercury vapor tube, 229 mm long, with reflector
- Filter in two sections, in easily removable frame
- Mid-range lamp used for fluorescing DNA bands in gel electrophoresis studies

Dense filters block ambient light while transmitting UV light to provide high contrast for effective visualization. Impact-resistant, plastic housing with integral handle, electrical ballast and on-off starter switch. Total radiating aperture: 146 x 57 mm.

Overall dimensions (L x W x H): 378 x 81 x 64 mm; weight 0.9 kg. UL listed. Models 6282T16, T25, T34 and T48 UL and CSA listed. With 3-wire cord and plug.

WARNING: short wave ultraviolet radiation is destructive to the eyes and can severely burn the skin even on short exposure. See Thomas number 6284E02 for UV blocking eyewear.



6282T16 (with 6282F35 stand)



6282T25

HAND-HELD ULTRAVIOLET LAMPS

THOMAS NO.	TYPE	WAVE LENGTH	RADIATION INTENSITY @ 3"	ELECTRICAL REQUIREMENTS	PRICE
6282T16	Long Wave	365 nm	1250 $\mu\text{W/cm}^2$	115 V, 60 Hz	\$125.00
6282T20	Long Wave	365 nm	1850 $\mu\text{W/cm}^2$	215 V, 50/60 Hz	125.00
6282T25	Mid-Range	302 nm	1500 $\mu\text{W/cm}^2$	115 V, 60 Hz	246.50
6282T34	Short Wave	254 nm	2250 $\mu\text{W/cm}^2$	115 V, 60 Hz	221.00
6282T48	Multiband	254 nm	1350 $\mu\text{W/cm}^2$	115 V, 60 Hz	257.50
		365 nm	1200 $\mu\text{W/cm}^2$		
		302 nm	1500 $\mu\text{W/cm}^2$		
6282T52	Multiband	254 nm	1200 $\mu\text{W/cm}^2$	215 V, 50/60 Hz	257.00
		365 nm	1200 $\mu\text{W/cm}^2$		
		302 nm	1500 $\mu\text{W/cm}^2$		
		365 nm	1200 $\mu\text{W/cm}^2$		

Warning

Short wave ultraviolet radiation is destructive to the eyes and can severely burn the skin, even on short exposure.

Use protective glasses; see Thomas numbers 6284E02 and 5774H48.



UVP

ULTRAVIOLET LAMPS

8 Watt Ultraviolet Lamps



6282T55

- Model 6282T55 has two tubes and two wavelengths
- Models 6282T58, T61 and T64 include two tubes, both the same wavelength
- 230 V available

8 WATT ULTRAVIOLET LAMPS

THOMAS NO.	WAVELENGTH	INTENSITY	ELECTRICAL REQUIREMENTS	PRICE
6282T55	365/254 nm	500/670	115 V, 60 Hz	\$309.00
6282T58	365 nm	1,150	115 V, 60 Hz	219.00
6282T61	254 nm	1,300	115 V, 60 Hz	349.00
6282T64	302 nm	1,300	115 V, 60 Hz	359.00

C-65 Darkroom Cabinet



6282T67

- Durable lightweight plastic
- Accommodates one or two 8 watt lamps
- Internal white light

Removable bottom panel allows cabinet to be placed over transilluminator or samples.

6282T67	DARKROOM CABINET, C-65, 115 V.....	695.00
6282T68	DARKROOM CABINET, C-65, 230 V.....	695.00

Bench Stand and Replacement Tube for UVP Lamps



6283F35

- Bench Stand takes lamps 6283F10, 6286K10 and 6286M10
- Aluminum, with bracket which holds lamp, face down, 178 mm above the 102 x 178 mm base
- Approximate area of effective radiation at table level is 305 x 229 mm with single-tube lamps; 457 x 305 mm with two-tube lamp

6283F50 Ultraviolet Lamp Tube 4 watt, long wave, is supplied with 6283F10 and 6286M10 lamps.

6283F35	BENCH STAND, J124.....	\$33.00
6283F50	LAMP TUBE, UV, 4 watt, 365 nm.....	14.00

Blak-Ray® Portable Ultraviolet Lamp, Long Wave



6282U40

- Battery operated
- Medium intensity, 365 nm; radiation intensity 1650 $\mu\text{W}/\text{cm}^2@3$
- Total radiating aperture is 146 x 57 mm
- Contains self filtering, 6 watt mercury vapor tube (6282U64), 216 mm long, with reflector
- Lamp is equipped with built-in flashlight bulb for visible illumination and is mounted vertically on front of housing, of impact resistant plastic with reinforced handle.

- Total weight 2 kg when equipped with batteries
- Three-position on/off starter which selects flashlight on UV lamp

Overall dimensions (L x W x H): 241 x 71 x 238 mm. Powered by two standard 6 volt lantern batteries which provide 10 hours of operation.

6282U40	UV LAMP.....	\$195.00
6282U64	LAMP TUBE, 365 nm, 6 Watt.....	75.50

Compact Ultraviolet Lamp, Long Wave, 4 W



6283F10

- Medium intensity, 1,000 micro watts per square centimeter of 366 nm radiation at a distance of 152 mm, with filter in place
- Uses a 4 watt mercury vapor tube, 149 mm long, with reflector
- Deep blue filter, 76 x 51 mm, has high transmission at 365 nm

Housing is of impact-resistant plastic 197 x 70 x 51 mm, with electrical ballast and on/off starter switch, CSA/UL listed, with cord and plug for 120 volts, 60 Hz, 4 watts. Replacement lamp is 6283F50. Bench stand is 6283F35

6283F10	LAMP, UV, U/L21.....	\$90.00
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UVP

ULTRAVIOLET LAMPS

Bench Stand and Replacement Tube for UVP Lamps

- Bench Stand takes lamps 6283F10, 6286K10 and 6286M10



6283F35 (shown in use)

- Aluminum, with bracket which holds lamp, face down, 178 mm above the 102 x 178 mm base
- Approximate area of effective radiation at table level is 305 x 229 mm with single-tube lamps; 457 x 305 mm with two-tube lamp

6283F50 Ultraviolet Lamp Tube 4 watt, long wave, is supplied with 6283F10 and 6286M10 lamps.

6283F35	BENCH STAND, J134	.....	\$33.00
6283F50	LAMP TUBE, UV, 4 watt, 365 nm	.....	14.00

Blak-Ray®, High Intensity



6283K45

- 1,100 microwatts per square cm of 366 nm radiation at a distance of 305 mm
- Radiating aperture 457 x 152 mm
- Illuminates 1.2 x 1.8 meter area at distance of 0.9 meters
- Beam angle 108°
- Light provided by two 6283H49 15 watt Tubes, self-filtering, 457 mm long, tubular, long wave
- Enameled, sheet-metal housing, prism-shaped, 483 x 152 x 102 mm, with aluminum reflector, electrical ballasts and on-off switch

With cord and plug for 120 volts, 60 Hz; 90 watts; lamp tubes not included. UL listed.

6283H45	LAMP, UV, Model XH-15, 150 V	.....	\$199.00
6283H49	LAMP TUBE, UV, 15 W	.....	33.00

Spotlight, Blak-Ray®



6283K10

- High-intensity; provides 8,900 $\mu\text{W}/\text{cm}^2$ of 365 nm radiation at distance of 254 mm, with filter in place
- Light source a high-pressure, mercury vapor bulb; 100 watt, sealed-beam, spot type; can be converted to floodlight by using 6283K48 flood-type bulb
- Radiating aperture 127 mm diameter
- Includes purple filter in recessed mounting; second filter of same type can be inserted to improve fluorescence contrast
- Ruggedly constructed, anodized aluminum housing, 133 mm diameter x 330 mm long, with plastic handle, mounted on stable transformer base 159 x 127 x 235 mm
- Lamp turns in mount to direct beam at any angle

Base has carrying handle, rubber feet and on-off switch; connected to the lamp housing by a 2.4 m secondary cord.

Overall dimensions 394 x 349 x 133 mm; weight 5.3 kg. With 3-wire cord and plug for 120 volts, 60 Hz; 100 watts; flood-type bulb not included. UL and CSA listed.

6283K10	SPOTLIGHT, UV, 115 V, Model S-100A	.....	\$399.00
6283K46	LAMP BULB, UV Spot, 100 W	.....	75.00
6283K48	LAMP BULB, UV Flood, 100 W	.....	91.00

High Intensity Inspection Lamps, B-100AP



6283F50

- Longwave ultraviolet
- 100 watts
- Ballast transformer base included
- Unique Cool-Touch housing

Lamps are good for inspection applications as the longwave UV radiation fluoresces extremely fine particles and surface defects normally invisible to the human eye. Pistol-grip handle is designed to reduce operator fatigue. Lamp handle rests in the ballast base for hands-free operation. When lamp is attached to the base, the lamp head can rotate 360° for maximum illumination.

Patented Cool-Touch™ plastic housing is heat-resistant, remaining cool to the touch. Vented housing permits additional cooling. Plus, the housing face has molded "feet" for allowing the lamp to be placed face down on the work surface without damage to the lamp.

Features a spot bulb and produces a highly intense center of UV irradiance about 5 inches in diameter. The intensity at 2" from work surface is 21,700 $\mu\text{W}/\text{cm}^2$ and at 10" it is 8,900 $\mu\text{W}/\text{cm}^2$.

6283K50 and K52 have 8 ft. primary and secondary cords and 6283K54 and K56 have 20 ft. primary and secondary cords.

For replacement UV Spot and Flood bulbs, see 6283K46 and K48.

6283K50	UV LAMP, 115 V	.....	\$499.00
6283K52	UV LAMP, 230 V	.....	499.00
6283K54	UV LAMP, 115 V, w/cord holder	.....	569.00
6283K56	UV LAMP, 230 V, w/cord holder	.....	569.00
6283K58	FINGER GUARD	.....	29.00

UVP

TRANSILLUMINATORS

White Light Transilluminators



6284D40

- Uniform light diffusion
- Scratch-resistant powder paint finish
- Glass is chemical and scratch resistant

These transilluminators are excellent for use in radiographic and x-ray film viewing, as

well as viewing negatives and film positives. Microtiter plates and stained gels such as Coomassie Blue, Methylene Blue and Silver Stained Protein gels can be examined.

Units are manufactured using scratch resistant powder paint finish. The smooth white plexiglass and glass combination is permanently sealed into the unit-double safety fused for durability. The glass provides a scratch and chemical resistant work surface which can easily be cleaned.

6284D40 is designed for use with 8" x 10" film sizes; this unit contains two cool white 8 watt bulbs. Use the 6284D45 with 14 x 17" film sizes. Four cool white, 14 watt tubes are contained in each of these units. Replacement bulbs are available upon request. The electrical cord on each unit is removable.

Overall dimensions: Model 6284D40 13 1/2" W x 9 1/2" D x 4 1/2" H;
Model 6284D45 16" W x 19" D x 4 1/2" H.

6284D40	TRANSILLUMINATOR, Model TW05, 115 V	..... \$350.00
6284D45	TRANSILLUMINATOR, Model TW03, 115 V	..... 440.00

White/UV Transilluminators



6284D87

- Save precious lab space by combining white light and ultraviolet work surfaces side by side
- Switch between the white light side for viewing Coomassie Blue stained gels or use the ultraviolet side for viewing ethidium bromide stained gels
- Sensibly, economically priced

Dimensions: 13.25" D x
19.13" W x 5.63" H.

6284D87	TRANSILLUMINATOR, White/UV, 365 nm, TUV-20	..... \$1,195.00
6284D90	TRANSILLUMINATOR, White/UV, 302 nm, TUV-20	..... 1,495.00

UV BLOCKING EYEWEAR



Eye and face protection is essential for anyone working with UV light sources. The specially formulated plastic construction of the eyewear blocks ultraviolet transmission over all UV wave lengths.

For additional protective eyewear, see Thomas numbers 5774F10 and 5774H48.

6284E02	FACE SHIELD, UV Blocking 830.00
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UVP

ULTRAVIOLET LAMP CABINET

Chromato-Vue® Cabinets



6284E12

- Primarily for viewing paper and thin layer chromatograms up to 330 x 533 mm; also suitable for observing fluorescence effects in bacterial cultures, botanical specimens, cloth, etc.

- With enclosed long and short wave light sources
- Molded, impact-resistant, plastic cabinet, 400 x 330 mm high

Viewing port in top panel framed by light-excluding shield of vinyl plastic, contoured and deep enough for comfortable viewing even when wearing glasses; shield removable for photography. Contrast filter in viewing port absorbs all ultraviolet light, increasing detectability of fluorescence by darkening background, protects eyes of observer. Front of cabinet open behind curtain, sealing out light. Lighted switches on top panel for each set of UV lamps and the two incandescent lamps.

Sheet-metal lamp housing subdivided into sections, 460 x 318 x 89 mm; contains two 457 mm emitter tubes, with reflectors, starter ballasts and filters. Two 254 mm short wave lamp tubes (6284E52) are 15 watt quartz envelope emitters. 6284E50 Filter, 70 x 318 mm, transmits at 254 nm; short wave radiation intensity 1,290 microwatts per square cm at cabinet floor. Two 365 mm long wave lamp tubes (6284E40) are 15 watt glass envelope emitters. 6284E36 Filter, 102 x 406 mm, has transmission peak at 365 nm, but passes radiation from 320 to 380 nm; long wave radiation intensity 2,100 microwatts per square cm at cabinet floor. Includes 3-wire cord and plug for 120 volts, 60 Hz, 230 watts; transilluminators not included.

6284E12	CHROMATO-VUE, Model C-705 \$1,579.00
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UVP

ULTRAVIOLET LAMP ACCESSORIES

Replacement Parts for Model C-70G Chromato-Vue Cabinet

- 6284E36, E40, E50, E52 and E58 are as supplied with 6284E12 Chromato-Vue Cabinet
- 6284E56 Lamp Bulb is standard 25 W incandescent lamp, with intermediate screw base, for visible illumination

6284E36	FILTER, 4 x 16 in., 365 nm	\$33.00
6284E40	LAMP TUBE, 15 W, Long Wave	13.00
6284E50	FILTER, 2½ x 12½ in., 254 nm	566.50
6284E52	LAMP TUBE, 15 W, Short Wave	45.00
6284E56	LAMP BULB, 25 W	10.00
6284E58	CONTRAST FILTER	33.00

UVP

PHOTODOCUMENTATION SYSTEM

An economical hard copy film camera system

- Provides the conveniences and advantages of a fixed, focal length camera with the quality of a UVP Transilluminator
- Wide variety of Darkroom Hoods and UV Transilluminators for photography of various size image areas right at the lab benchtop
- DS-34 camera features a built-in trigger shutter release and variable shutter speeds and aperture settings
- Can be used with White Light Transilluminators for auto radiographs and more



6284E70

System includes: DS-34 Camera, UV Transilluminator, Darkroom Hood, Filter 23A, UV Blocking Glasses, Gel-Cutter and Instant 8&W Film 667. Comes complete with filter for use with Ethidium Bromide Stained Gels. 6284E70 includes model M-20E transilluminator. 6284E72 includes model M-20 transilluminator.

Optional filters allow for Protein Gels (Coomassie Blue) and DNA Gels (Methylene Blue) photography.

6284E70	FD-20E PHOTODOCUM w/ M20E	\$2,285.00
6284E72	FD-20 PHOTODOCUM w/ M20E	2,315.00
6284E74	CAMERA, DS-34	757.00
6284E76	POLAROID FILM, 667, Twin Pack, 500 Exposures	821.85
6284E78	FILTER 8, use with Coomassie Blue and EtBr	36.00
6284E79	FILTER 23A, use with Ethidium Bromide Stain	36.00
6284E82	FILTER 47, use with HRP and Auto Radi	64.00
6284E84	FILTER 58, use with Silver Stain	36.00
6284E86	HOOD 15	215.50
6284E88	HOOD 20	225.50

UVP

BioDOC-IT™ IMAGING WORKSTATION

Digital camera eliminates the need of still camera film



6284E90 and 6284E94 (inset)

- Creates digital images
- Space saving darkroom system
- High resolution monochrome monitor
- Archive quality 256 gray scale thermal paper

This system was designed for imaging DNA, RNA and protein gels. View and capture images using PhotoDOC-IT Link. Document the gel images with a high quality thermal printer and download images to a computer. Includes darkroom with overhead white light and full access door, Digital CCD camera with zoom lens, monochrome high resolution monitor, Grab-IT™ image acquisition software, UV filter and close-up diopter, benchtop UV transilluminator. 20 x 20 cm filter format, 302 nm UV and highflow intensity.

SPECIFICATIONS:

Camera	752 x 582 pixels PAL (768 x 484 pixels NTSC)
Lens	Zoom 8-48mm with +1 diopter close-up
Filter	Combined UVRV filter
Transilluminator	Model M-20 H&L intensity 302nm wavelength 20 x 20cm filter format
Darkroom	UV safety switch (for door open)
Monitor	Standard video input
DOC-IT Link	Up to 4 seconds integration

6284E90	PhotoDOC-IT WORKSTATION, 115 V	\$5,948.00
6284E92	PhotoDOC-IT WORKSTATION, 230 V	5,948.00
6284E94	THERMAL PRINTER, Video/Analog/15 V	1,929.00
6284E96	THERMAL PAPER, 4 rolls	104.00
6284E98	SIRR GREEN CAMERA FILTER	217.75

UVP

VIEWING CABINET

CC-10 Chromato-Vue® Viewing Cabinet



6284652

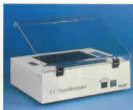
- For use with an external ultraviolet lamp, for observing fluorescent effects on chromatograms, etc.
- Provides an enclosed viewing space which eliminates external light interference
- Cabinet features a special contrast control filter that absorbs UV energy before it reaches your eyes
- Safe, fatigue-free viewing with no blue haze
- Light-weight access curtain allows for easy entry and blocks out external lighting
- Fluorescence viewing is in complete darkness.

Removable bottom panel lifts out by hand, allowing the user to set the cabinet over larger mineral samples or bulky items for fluorescence inspection. Overall dimensions: 10 x 8½ x 9½ inches high.

6284652 CHROMATO-VUE, Model CC-10 \$151.00

UVP

UV TRANSILLUMINATORS



6285A04



6285A10

- All models are equipped with an exclusive "5000 hour UV 6" long life filter that provides extended filter life and decreases the polarization rate dramatically
- Provides an even distribution of UV light allowing better gel documentation
- Equipped with adjustable, transparent protective lid to block out 100% of the UV radiation

Special design emits high intensity excitation UV for back-illumination of transparent fluorescent materials to better detect double strand nucleic acids. 230 V available.

TRANSILLUMINATORS

THOMAS NO.	MODEL	FILTER SIZE (cm)	UV WAVELENGTH (nm)	STYLE INTENSITY	DIMENSIONS D x W x H, inches	PRICE
BENCH TOP FORMATS SINGLE OR VARIABLE WAVELENGTH (20 V, 30 V) IN ONE UNIT						
6285A02	M-15E	15 x 15	302	Single	9.5 x 13.25 x 4.75	\$909.00
6285A04	M-15	15 x 15	302	H/Lc	9.5 x 13.25 x 4.75	909.00
6285A06	M-20E	20 x 20	302	Single	9.5 x 13.25 x 4.75	1,169.00
6285A08	M-20	20 x 20	302	H/Lc	9.5 x 13.25 x 4.75	1,169.00
6285A10	M-26E	21 x 26	302	Single	9.5 x 13.25 x 4.75	1,369.00
6285A12	M-26	21 x 26	302	H/Lc	9.5 x 13.25 x 4.75	1,369.00
6285A14	LM-20E	20 x 20	365/302	Single	9.5 x 13.25 x 4.75	1,389.00
6285A16	LM-26E	21 x 26	365/302	Single	9.5 x 13.25 x 4.75	1,629.00
6285A18	LMS-20E	20 x 20	365/302/254	Single	11 x 14 x 5.63	1,839.00
6285A20	LMS-26E	21 x 26	365/302/254	Single	11 x 14 x 5.63	1,899.00



Government Customers

Thomas Scientific is considered a small business for government procurement purposes. For more information, call:

800 524 1364

◆ IMPAC cards accepted

◆ LIDS program participant

UVP

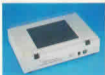
HIGH PERFORMANCE UV
TRANSILLUMINATOR

Exclusive 25 watt high intensity transilluminator

- Longwave, midrange or shortwave UV (365, 302 or 254 nm)
- UV blocking cover included

Transilluminators produce extremely uniform UV brightness across the entire work surface. They provide high intensity and brilliant fluorescence with back-lit illumination. The High/Low intensity settings provide the necessary flexibility for laboratory research. The Low setting reduces photobleaching or photobleaching of gel samples during prep work. The High setting can be used in analytical documentation work. The UVG™ filter work surface is designed to decrease solarization of filter to prolong the filter life and to provide greater ultraviolet transmission throughout the filter's life span.

The included UV blocking cover shields the user from harmful UV radiation. The cover can be adjusted to different angles or removed from the unit. Unit housings are manufactured from durable metal and painted with a high quality, chemical and scratch resistant powder coating. Power requirements: 115 V. Dimensions: 19.13" W x 13.25" D x 5.63" H (48.6 x 33.6 x 14.3 cm). Height includes the cover. Unit features a two year manufacturer's warranty.



6285A23



6285A47

THOMAS NO.	MODEL NO.	FILTER SIZE	WAVELENGTH	PRICE
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STANDARD FORMAT: LARGER FILTER SIZES FOR VIEWING LARGER GELS

6285A23	TFL-40	20 x 40 cm.	365 nm	\$859.00
6285A26	TFM-40	20 x 40 cm.	302 nm	1,949.00
6285A29	TFM-30	25 x 30 cm.	302 nm	1,799.00
6285A32	TFM-20	21 x 26 cm.	302 nm	1,619.00
6285A35	TFM-20	20 x 20 cm.	302 nm	1,359.00
6285A37	TFL-26	21 x 26 cm.	302-365 nm	1,789.00
6285A39	TFML-40	20 x 40 cm.	302-365 nm	2,099.00
6285A50	TFS-20	20 x 20 cm.	254 nm	1,329.00
6285A52	TFS-26	21 x 26 cm.	254 nm	1,619.00
6285A54	TFS-30	25 x 30 cm.	254 nm	1,789.00
6285A56	TFS-40	20 x 40 cm.	254 nm	1,949.00

6285A41	UV-WHITE CONVERTER PLATE, 21 x 26 cm	\$272.00
6285A43	UV-WHITE CONVERTER PLATE, 20 x 40 cm	355.75
6285A45	VIS-BLUE PLATE, 21 x 26 cm	344.20
6285A47	VIS-BLUE PLATE, 20 x 40 cm	451.00

UVP

STERILAIRE® XX SERIES UV LAMPS

Designed for sterilization applications in laboratories, pharmaceutical companies, hospitals and clinics

- Can kill up to 99% of bacteria organisms, yeast, mold spores, germs and viruses
- 254 and 302 nm models



6285B71

Lamps can be used in an upward facing position for purifying air or in a downward position for sanitizing work surfaces. Decontamination of work surfaces prior to PCR reduced airborne contamination during DNA sequencing. Lamps are useful for temperature sensitive applications due to their low operating temperatures. Lamps can be hung (brackets included) to reduce space required on bench top.

THOMAS NO.	MODEL NO.	WAVE-LENGTH	DIMENSIONS L x W x H, IN.	ELECTRICAL REQUIREMENTS	PRICE
6285B71				115 V, 60 Hz	\$259.00
6285B13	XX15S	254	19.75 x 6 x 4.25	230 V, 60 Hz	259.00
6285B15				115 V, 60 Hz	273.00
6285B17	XX15M	302	19.75 x 6 x 4.25	230 V, 60 Hz	273.00
6285B19				115 V, 60 Hz	307.00
6285B21	XX25S	254	24 x 6 x 4.25	230 V, 60 Hz	307.00

6285B30	XX15S TUBE, 15 W, 254 nm	\$32.00
6285B33	XX15M TUBE, 15 W, 302 nm	42.55
6285B35	XX25S TUBE, 15 W, 254 nm	45.25

UVP

PEN-RAY® SHORT WAVE UV LAMP

Provides high accuracy and reproducibility for close-range examination of specimens, calibration of spectrophotometers, etc.

- High-intensity; produces 4,400 $\mu\text{W}/\text{cm}^2$ of 253.7 nm radiation at distance of 19 mm
- Life-rated for 5,000 hours
- Radiating length 64 mm, o.d. 8.4 mm



6286C16

Mounted in phenolic plastic handle, 9.5 mm o.d., overall length 127 mm. With 380 mm cord and plug for connection to 6286C20 Power Supply; filter shields, light shield and power supply not included.

6286C16	PEN-RAY LAMP, Model 115C-1, 254 nm	\$110.00
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UVP

PEN-RAY® POWER SUPPLY



6286C20

- For use with 6286C16 Pen-Ray Lamp to provide correct voltage and current
- Housing 140 x 57 x 76 mm high
- With on-off switch and 0.9-m cord with receptacle for plug of lamp connecting cord

Includes 3-wire power cord and plug for 120 volts, 60 Hz, 35 watts.

6286C20 POWER SUPPLY, Model SCT-1 \$190.00

UVP

UVG-11 SHORT WAVE
UV LAMP

6286K10

- Intensity: 1120 microwatts per sq. cm of 253.7 nm radiation at a distance of 152 mm, with filter in place
- Uses 4 watt, mercury vapor tube (6286M30), 149 mm long, with reflector
- 6286M20 Filter, 75 x 50 mm, transmits at 263.7 nm
- Impact-resistant, plastic housing, 194 x 73 x 51 mm, with ballast and on-off starter switch; comfortably fits hand
- Total weight 0.5 kg

With cord and plug for 115 V/60 Hz; 14 watts. UL listed; meets OSHA requirements. Uses 6283F35 bench stand.

6286K10 MINERALIGHT, Model UVG-11 \$160.00

UVGL-25 MULTI-WAVELENGTH UV LAMP



6286M10

- Compact, just under 8" in length make them ideal for benchtop work in the laboratory, demonstrations in the classroom, industrial inspection or use by the hobbyist
- Dual short and long wave UV, this 4 W lamp weighs only 0.5 kg
- A width of barely 3" permits easy handling with on/off buttons easily within reach of the fingers

Includes 6286M20 UVG filter that provides thousands of hours of fluorescence before solarization. Casing is made of impact-resistant Cyclocac plastic which will never fade, peel or crack. Overall dimensions: 194 x 73 x 51 mm. Can be used with Thomas number 6283F35 Bench Stand, CSA/UL listed. Includes one 365 nm UV tube (6283F50) and one 254 nm UV tube (6286M30).

HANDLAMPS

THOMAS NO.	ELECTRICAL	WAVELENGTH	INTENSITY AT 3"	PRICE
6286M10	115 V/60 Hz	254/365 nm	760/720 $\mu\text{W/cm}^2$	\$190.00
6286M15	230 V/50 Hz	254/365 nm	760/720 $\mu\text{W/cm}^2$	190.00

Accessories

6286M20	SPARE UVG FILTER, 75 x 50 mm, 254 nm	80.00
6286M30	REPLACEMENT LAMP, UV, 4W, 254 nm	26.50

UVP

MINERALIGHT® DISPLAY UV LAMPS

Designed for fluorescence applications, sterilization or inspection



6286M40

- Sturdy metal design with powder paint finish
- Longwave, shortwave, combination longwave/shortwave and midrange models

Lamps use two 25 watt tubes for 50 total watts. Lamps can be handheld or secured to the ceiling or wall with included mounting brackets. Dimensions (L x W x H): 18.5" x 4.5" x 3.5"; weight: 6.4 lbs.

THOMAS NO.	MODEL NO.	WAVELENGTH	ELECTRICAL REQUIREMENTS	PRICE
6286M40	UVL-2250	365	115 V, 60 Hz	\$290.00
6286M42			230 V, 60 Hz	290.00
6286M44	UVS-2250	254	115 V, 60 Hz	748.00
6286M46			230 V, 60 Hz	748.00
6286M48	UVLS-2250	365/254	115 V, 60 Hz	649.00
6286M50			230 V, 60 Hz	649.00
6286M52	UVM-2250	302	115 V, 60 Hz	729.00
6286M54			230 V, 60 Hz	729.00

6286M56	TUBE, 302 nm	147.95
6286M58	TUBE, 254 nm	39.85
6286M60	TUBE, 365 nm	29.10

UVP

HIGH INTENSITY SHORT WAVE UV

Mineralight® R-52G

- Ozone-free grid lamp for mineral display, sterilization and photochemistry
- Mounted on its transformer or handheld, this high intensity short wave (254 nm) lamp delivers 1250 $\mu\text{W}/\text{cm}^2$ with the filter on
- Easily converts from fluorescence analysis procedures to germicidal sterilizing applications by simply removing the convenient snap-on filter assembly
- UVG filter provides thousands of hours of fluorescence before solarization



6286F02

6286F03	SHORTWAVE UV LAMP, 254 nm, R-52G	\$605.00
6286F42	REPLACEMENT LAMP TUBE, UVG Grid, 254 nm	280.00

UVP

BLAK-RAY® DIRECT READING
ULTRAVIOLET INTENSITY METER

- Photovoltaic device for measuring the intensity of UV light sources
- Unit is ideal for monitoring germicidal lamp irradiance, measuring Q.C. Inspection lamps and producing accurate and repeatable measurements for critical experiments
- Certified to be within UVP's published standards and traceable to the National Bureau of Standards
- 6286V10 measures the intensity of UV light sources, the sensor is sensitive within a range from 220 to 280 nm with a maximum sensitivity at 254 nm
- 6286V20 has long wave intensity readings, sensitive from 300 to 400 nm with a peak sensitivity at 365 nm



6286V10

Each unit features plug-in type sensors and two scales for low and high intensity readings. For remote readings, a 4-foot extension cord connects the sensor to the meter. To ensure accurate measurements, an IR filter is included for measuring lamps which produce infrared radiation. Reduction screen can be used to attenuate the UV for very high intensity lamp measurements. Designed for ease of use operation, provides a reliable method for monitoring UV light source efficiency.

6286V10	UV METER, J-225, Short Wave	\$485.00
6286V20	UV METER, J-221, Long Wave	468.00

UVICIDE® GERMICIDAL LAMP MONITOR
CARD

- Monitors germicidal lamp performance to ensure that exposed microorganisms have received adequate dosage of 254 nm radiation
- Can also monitor degradation of lamp output by observing time required for monitor dots to change color; as lamp intensity weakens, time to change increases
- Monitor is a 90 x 50 mm card with three 6 mm dots that change from light pink to deep, vivid pink on exposure to 254 nm radiation
- One dot is labeled "REFERENCE", one is labeled "BACTERIA KILLED" and the third is labeled "MOLD SPORES KILLED"
- Reference dot changes color rapidly; bacteria dot changes after a 16,000 microwatt-sec/cm² dosage; mold spore dot changes after a 150,000 microwatt-sec/cm² dosage
- Dots reflect accumulated dose; if lamp is turned off and then on again, monitor registers effect of both doses
- Monitor has spaces to record location, user, date and time; can be stored for later reference, provided monitor is protected against further exposure to UV light



6287D10

Packed in resealable plastic bags, opaque to ultraviolet light. Case contains five bags of 20.

NOTE: unused monitors should be kept sealed in the bag to avoid exposure to ultraviolet light.

6287D10	UV LAMP MONITOR, Bg. 20	\$37.65
6287D12	UV LAMP MONITOR, Cs. 100	186.25

Warning

Short wave ultraviolet radiation is destructive to the eyes and can severely burn the skin, even on short exposure.

Use protective glasses; see Thomas numbers 6284E02 and 5774H48.



LAMOTTE

LEAD IN SOLDER TEST KIT

A qualitative test for lead based solders only



6289A25

- Test method: Spot Plate — Plumbing inspector kit
- Range and Sensitivity: Yes/No
- Reagent System: Sodium Rhodizonate, 3 reagents
- Kit includes 100 tests

NOTE: reagents in this test are banned for household use.

6289A25	LEAD IN SOLDER TEST KIT.....	\$51.10
6289A30	REAGENT REFILL for 6289A25.....	24.80

LEADCHECK® SURFACE SWABS

Provide a rapid, easy-to-use test for lead on any surface



6289C70

- Easy to interpret results in thirty seconds
- Disposable
- Generate no hazardous waste

Swabs turn pink if lead is present. Swabs work on any surface including paints, glazes, work surfaces, ceramics, tools, solder, dusts and soils. Included confirmation enables user to verify test results.

6289C05	SURFACE SWABS, LeadCheck, Pk. 8.....	\$31.95
6289C10	SURFACE SWABS, LeadCheck, Pk. 16.....	\$4.85

LIQUIDCHECK LEAD KIT

A rapid screening check for lead in waste liquids or water



6289C12

- Economical
- Fast results in 5 minutes or less
- No special training required

LiquidCheck for lead screens liquids for the presence of lead at levels considered to be hazardous waste.

Technology eliminates problems associated with turbidity or

particulates. Detects lead in portable water and waste water as well as a variety of hazardous liquids such as motor oil, manufacturing effluents and anti-freeze. Field test kits calibrated to test from 1-4 ppm or 0.25-0.75 ppm sensitivity. Kit contains all necessary equipment and chemicals to perform five tests in the field. Refill kit contains chemicals for 10 tests.

6289C12	LIQUIDCHECK KIT, For 1-4 ppm, 5 Tests.....	\$73.30
6289C13	LIQUIDCHECK KIT, For 0.25-0.75 ppm, 5 Tests.....	38.15
6289C17	REFILL KIT, For 6289C12, Pk. 10 Tests.....	106.30

LEADCHECK® SOIL TEST KIT

Meets proposed EPA guidelines of 400 ppm sensitivity



6289C25

- Results in ten minutes
- Easy to use
- Requires no specialized training
- Ideal for fast screening of lead in soils for inspections, quality control and risk assessment

Test consists of three simple steps. Kit includes reagents to perform six tests and detailed instructions.

6289C25	LEADCHECK SOIL TEST KIT.....	\$76.85
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LENS CLEANER

Pre-moistened Lens Tissue

- Anti-fog and anti-static
- Silicone

Wipes are suitable for cleaning eyewear, computer screens and more. Excellent on glass and plastic surfaces, leaving cleaned surface crystal clear with no messy streaking.



6291B15

6291B15	LENS CLEANER, Bx. 100	\$3.00
6291B18	LENS CLEANER, Cs. 1,000	72.50

DISPOSABLE LENS CLEANING STATION

- Includes an 8 oz. polyethylene spray bottle of cleaning solution and a package of 600 lens tissues in coated paper board dispenser for bench top or wall mounting
- Cleaning solution is suitable for use on glass and plastic lenses, leaving surface resistant to dust and fogging



Tissues are 130 x 300 mm; overall dimensions: 140 x 210 x 210 mm high.

6291W10

6291W10	LENS CLEANING STATION	\$20.95
6291W12	LENS CLEANING STATION, Cs. 8	167.60

WHATMAN

REEVE ANGEL LENS PAPER

Suitable for cleaning optical instruments

- Soft, silky paper
- Free from hard particles, dirt and lint
- Size: 20 x 30 cm



6292B12

6292B12	LENS PAPER, Pk. 100	\$25.80
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KIMBERLY-CLARK

LENS CLEANING STATION

Will not scratch delicate surfaces

- Provides over 500 cleanings
- Extra low lint and extractables
- Includes cleaning solution



6292B50

Self contained cleaning station has absorbent Kimwipes® EX-L to clean glass and plastic lenses easily. Each station includes 560 wipes and eight ounces of cleaning solution. Wipes are 4.5" x 8.5". Cleaning solution comes in a spray pump dispenser. Station is made of rugged, recyclable cardboard and is self-standing or wall mountable.

6292B50	LENS CLEANING STATION	\$17.00
6292B55	LENS CLEANING STATION, Pk. 6	103.20



LENS PAPER

- Economical lens papers in book form
- Soft and free of impurities
- Does not easily collect dust or become greasy and harsh
- 100 x 150 mm; 50 sheets to a book



6293F10

6293F10	LENS PAPER, Pk. 10 books	\$14.00
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Dispensing Box

- Soft, lintless paper, free from impurities
- Non-abrasive
- Suitable for cleaning optical instruments
- Safe for coated lenses
- Size: 5" x 7"; box contains 2,000 papers



6293F30

6293F30	LENS PAPER, Bx. 2,000	\$27.25
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LENS PAPERS



- Fine, lintless, non-abrasive paper of 100% linen stock
- Suitable for cleaning critical optical surfaces, electron microscopy materials, thin film substrates and laser and semiconductor crystals
- Safe for coated lenses
- Size: 4 1/2" x 5" (108 x 127 mm)
- In dispenser package

6292F50

6292F50 LENS PAPER, Pk. 1,000..... \$15.50

SPER SCIENTIFIC

LIGHT METERS

Especially suited for monitoring light levels in work places and schools, environmental studies, biology, optics and reflectance and transluence properties of materials



- Compact and portable: can be used to monitor light levels anywhere or to check lux level of a specific light source
- Range: 0.1 to 20,000 lux
- Quick, accurate responses Selenium cell photosensor is hermetically sealed to ensure long-term stability
- Four-digit LCD is large and easy to read

With data hold switch to freeze results and a recorder output. Includes carrying case, photosensor cover, instructions and 9 V battery (for replacement battery, see Thomas numbers 1481K65, K75). Dimensions: meter - 4 1/2" x 2 1/2" x 1 1/2"; sensor - 5" x 2 1/2" x 1 1/2"; 5' lead from sensor head to readout. Weight: 5 oz.; sensor: 3 oz. Available with NIST certificate of calibration.

6293A02

6293A02 LIGHT METER..... \$109.00

6293A05 LIGHT METER, NIST Traceable Certificate..... 168.00

SPER SCIENTIFIC

BROAD RANGE LIGHT METER



6293A10

Similar to 6293A02 with the following additional features:

- Range: 0.1 to 50,000 lux
- Max-Min-Ave functions
- Automatic power off
- RS 232C output

Detachable probe Meter is able to compensate for the different colors of tungsten, fluorescent, mercury and sun light with the touch of a button. Can compare the % difference between two light intensities. Contrast control allows the LCD to be clearly read from different angles. Includes carrying case and 9 V battery (for replacement battery, see Thomas numbers 1481K65 and

K75). Dimensions: meter - 7" x 3" x 1 1/2"; sensor - 3" x 2" x 1 1/2". Weight: 11.6 oz. Available with NIST certificate of calibration.

6293A10 LIGHT METER, Broad Range..... \$194.00

6293A12 LIGHT METER, Broad Range, NIST Traceable Certificate..... 227.00

TEK-LUBE™ TECHNICAL LUBRICANTS

Formulated for laboratory instruments that require lubrication for optimal performance



6293A15

- Autoclavable and durable
- Compatible with gaskets and O-rings
- Environmentally safe

Disposable pen style applicator is made of clear plastic with a fine tip that allows precise application of

lubricant to the friction area. Instruments can be lubricated before autoclaving without compromising sterility. It does not contain heavy metals or reactive substances. Each applicator contains 7.47 mL of lubricant. FDA and USDA approved, Tek-Lube is clear, odorless and non-soluble in water.

Silicone formula for pipettors is designed for the special lubrication needs of piston operated pipettors. General purpose lubricant contains Teflon® and is ideal for most laboratory instruments, appliances, compressors, timing devices, hydraulic devices and other equipment.

6293A15 TEK-LUBE, Silicone Formula, Pk. 6..... 629.94

6293A17 TEK-LUBE, Silicone Formula, Cx. 72..... 369.28

6293A19 TEK-LUBE, General Purpose, Pk. 6..... 29.94

6293A21 TEK-LUBE, General Purpose, Cx. 72..... 369.28

SPER SCIENTIFIC

MAGNETIC FIELD TESTER
(GAUSS)

Measures electro magnetic emissions from power lines, computer monitors, television sets, video machinery and other electrical appliances



6294410

- Built-in single axis probe
- Range: 0.1 to 199.9 mGauss
- Accuracy: $\pm 4\%$ +3 digits at 50/60 Hz
- Can be used to check compliance with the European Union's Electro Magnetic Compatibility Directive IEC 801-1 (EN 50081-1)
- Will run on a single 9 V battery for approximately 200 hours

Dimensions: $5\frac{1}{2}" \times 2\frac{3}{4}" \times 1"$. Field Tester is also available with Certificate of Compliance.

6294A10	ELECTRO MAGNETIC FIELD TESTER	\$108.00
6294A12	ELECTRO MAGNETIC FIELD TESTER, with Certificate	139.00

BAUSCH & LOMB

MAGNIFIERS

1. Pocket Type

- Three lenses, one 17 mm and two 20 mm diameter
- Magnification range 5X to 20X
- In folding pocket case



6381030

6381030	MAGNIFIER, Triple Lens	\$29.00
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2. Coddington Illuminated

- Magnifies 10X, with corrected cylindrical lens
- Built-in light source projects through lens, providing illumination of field
- Chromium-plated brass handle, 16 mm diameter, with sliding switch and pocket clip
- Equivalent focus 25 mm; diameter of field 20 mm; working distance 18.8 mm



6382C11

Overall length 152 mm. One miniature lamp bulb included; requires two AA batteries.

6382C11	MAGNIFIER, Illuminated, 10X	\$32.79
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3. Coddington Magnifier

- Provides good definition and a wide field
- Correction in these magnifiers is achieved through the use of a single thick lens with a control groove diaphragm
- Provides a sharp, crisp image
- Has a swing-away nickel-plated case



6382F15

Specifications: Focal distance: 25 mm, Power: 10X, Diopters: 40D, Lens diameter: 19.8 mm.

6382F15	MAGNIFIER, 10X	\$29.45
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4. Hastings Triplet Measuring Magnifier



6383D60

- A valuable tool wherever precision work is performed
- 7X Hastings lens, which is adjustable for individual focus, provides a flat, distortion-free image
- Transparent body allows illumination to fall on the magnified area

Includes leather case, measuring scales must be purchased separately. Specifications: Focal distance: $1\frac{1}{2}"$ (3.8 cm, Power: 7X, Diopters: 28D, Lens Diameter: 19.8 mm.

6383D60	MAGNIFIER, 7X	\$70.85
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5. Magnifier Scales

- For use with 6383D50 Magnifier
 - Glass, with peripheral metallic coating
 - 6383D60 Scale permits measurements of radii, angles, size and line widths
- Graduated from $\frac{1}{16}$ to $\frac{1}{8}$ inch radii in $\frac{1}{16}$ inch radii intervals, from 0° to 90° angles in 1° intervals, from 0 to 0.5 inch in 0.005 inch intervals and from 0 to 10 mm in 0.1 mm intervals. In addition, it has hairlines 0.001 inch, 0.002 inch and 0.003 inch wide.



6383D60

6383D65 Scale is graduated from 0 to 0.75 inch in 0.005 inch intervals. 6383D70 Scale is graduated from 0 to 20 mm in 0.1 mm intervals.

6383D60	SCALE, General Purpose	\$40.13
6383D65	SCALE, Inch	40.13
6383D70	SCALE, Metric	40.13

MAGNIFIER WITH RETICLE SCALE



- With scale reading to 0.5 inch in 0.005 inch divisions for measurements on flat surfaces
- Lens provides 6X magnification; holder is threaded for attachment to stand and can be rotated in stand to adjust for individual focus
- Size 25 mm diameter x 44 mm long

Includes 2 English scale reticle discs, one with black graduations and one with white to assure contrast against various backgrounds. Furnished with case. Also usable with 6383E15 Reticle Set which includes 2 reticles, scaled 0 to 15 mm in 0.1 mm divisions, one with black and one with white graduations.

6383E10

6383E10	MAGNIFIER WITH ENGLISH SCALE RETICLES	.....	\$3.00
6383E15	RETICLE SET, Metric Scale	.....	7.95

BAUSCH & LOMB

WATCHMAKER'S LOUPES

5X Magnifier



- Magnification 5X; 20 diopters
- Lens is optical quality white glass, diameter is 25.4 mm
- Focal distance 51 mm
- Loupe comes in plastic mounting for holding in the orbit of the eye

6383F10

6383F10	MAGNIFIER, 5X	\$15.30
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4X-7X Magnifier



- Fitted with two lenses, one of which is removable
- Diameter of lenses 13 and 25 mm; magnification 4X and 7X; equivalent focus 28 mm and 83 mm

6383F25

6383F25	MAGNIFIER, Double Lens, 4X, 7X	\$26.90
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BAUSCH & LOMB

MAGNIFIERS

Linen Tester



6383L31

- Primarily for counting threads in cloth
- Hinged plastic mounting folds up when not in use
- One-inch square opening in base graduated in millimeters and 32nds of an inch

Magnification 5X. Acrylic plastic lens 28 mm diameter. With plastic case.

6383L31	MAGNIFIER, 5X	\$9.85
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BEL-ART

ILLUMINATED MAGNIFIER

Eliminates eye strain



6383L35

- Readings magnified 3X (5X with magnification insert, included)

Self-illuminating focused bulb operates on 2 "C" batteries (not included, see Thomas number 1481C10). The areas of investigation are pinpointed by a black guide bar which is divided into 1 cm divisions to aid in determining the results. Three-position switch: On, Off and Momentary. Dimensions: 4" W x 4" D x 3 1/2" H.

6383L35	ILLUMINATED MAGNIFIER	\$51.55
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BAUSCH & LOMB

READING GLASS



6384U10

- Rectangular lens, 51 x 102 mm
- Magnification approximately 2X
- With lightweight, black plastic frame and offset handle

6384U10	MAGNIFIER, 51 x 102 mm, 229 mm Focals	\$16.00
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PENSCOPE MAGNIFIER

Fits in your pocket like a pen

- Rugged brushed aluminum body
- Clear acrylic easy-focus base



Precision glass lens system provides distortion-free detail inspection. Clear plastic mount admits light to subject under view and holds scope at proper focus. Available in 25X or 50X magnification; 5" in length.

6384K25

6384K05	PENSCOPE, 25X	\$39.50
6384K10	PENSCOPE, 50X	\$6.00

DYNALITE QUARTZ HALOGEN ILLUMINATORS

Available in single or dual lamp models

- Long-life dichroic reflector bulbs
- Spot, combination or flood beam illumination patterns
- Stepless electronic intensity control

Designed to produce electronically adjustable levels of brilliant white (3,000°K) light to suit the most demanding visual inspection tasks. Vented anodized aluminum bulb guards have a fingertip adjustment ring. Non-tip weighted base with baked enamel finish provides high stability for the fully adjustable lamp heads. A chrome flex arm and all-angle swivel provide an infinite choice of lamp head positions. The solid state power supply has a full range electronic intensity control for precise adjustment of light levels. Built-in magnifier attachment allows hands-free use of the optional magnifier kit (0815A07). This optional magnifier has a large 4.5" diameter viewing area at 1.25X (3 diopter) and includes an integral 1" diameter spot on the lens face for 2X magnification (12 diopter).

The computer-designed, high-efficiency tungsten quartz halogen bulbs have integral multi-facet parabolic reflectors, dichroic coating and universal beam pattern providing usable light levels exceeding 6,000 ft. candles intensity per bulb. Bulbs average lifespan is over 5,000 hours.



6385A07

6385A01	DYNALITE, Dual Head Illuminator	\$136.00
6385A03	DYNALITE, Single Head Illuminator	146.00

DYNALUME[®] ILLUMINATORS

SunLite / Hi-Intensity Illuminators

- Long life spot/flood beam high output bulbs
- Stepless electronic intensity control
- Neon-type power on/off indicator
- Available in single or dual lamp models



6385K13

Designed to provide a wide range of brilliant light. Levels exceeding 3,200 ft. candle intensity (2,900°K) are adjustable to the most exacting applications. Solid state intensity control provides a wide range of electronic adjustment of bulb intensity to suit every application. Non-tip weighted base with baked enamel finish provides high stability for the fully adjustable lamp heads. A chrome flex arm and all-angle swivel provide an infinite choice of lamp head positions. The tungsten/argon type bulbs have an average lifespan of over 2,500 hours. Built-in magnifier attachment allows hands-free use of the optional magnifier kit (0815A07).

6385K11	SUNLITE I, Single Head Illuminator	\$121.00
6385K13	SUNLITE I, Dual Head Illuminator	165.00

MicroLite Microscopic Bench Top/Inspection Illuminator Systems

- Spot, combination or flood beam illumination patterns
- Stepless electronic intensity control
- Long-life dichroic projectors
- Available in micro- or mini-head options



6385K21

Provide the highest intensity bi-directional lighting as required by current inspection practices and precise binocular viewing in all inspection procedures. The solid state power supply has a phenolic enclosure with a baked-enamel finish steel panel. The full-range electronic intensity control allows precise adjustment of light levels. Built-in magnifier attachment allows hands-free use of the optional magnifier kit (0815A07).

The micro dual head model (6385K21) has tungsten quartz halogen bulbs that provide up to 6,000 ft. candles and a IR rejecting dichroic reflector. The economical mini dual head model (6385K23) has tungsten argon bulbs that provide 6,400 ft. candles.

6385K21	MICROLITE, Micro-Head Illuminator	\$195.00
6385K23	MICROLITE, Mini-Head Illuminator	155.00

ILLUMINATED MAGNIFIERS

Bausch & Lomb Illuminated



6385M20

- Wide-field, 2X optical quality, white glass lens, 51 x 102 mm, in plastic frame, swivel-mounted on stand
- Illuminator has 7 watt bulb in plastic housing, also swivel-mounted on stand

Chrome-plated stand with non-skid sleeves on feet; distance between feet approximately 125 mm. With 2-wire cord and plug for 120 volts.

6385M20 MAGNIFIER, Illuminated \$47.78

Luxo Illuminated



6385M30

- Wide-field, 3-diopter (1.75X) lens magnifier, 127 mm diameter; encircled by 22 watt fluorescent lamp tube and attached by swivel joint to articulating, spring-balanced, support arm
- Glides easily to desired elevation and angle; maximum extended length 1,143 mm
- Arm assembly swivel-mounted on shelf clamp for attachment to surfaces up to 57 mm thick

Enameled aluminum housing. With 6281D42 Lamp Tube, 3-wire cord and plug for 120 volts.

6385M30 MAGNIFIER, Illuminated Lamp \$278.00



2X MAGNIFIER LAMP

Bright illumination with 2X magnification



6385M33

- Large viewing area
- Easy fingertip control
- Clamps vertically or horizontally to the top or side of any ledge
- UL and CSA listed

Magnifier Lamp is the ideal tool to view objects at two times magnification in bright light, high contrast and with a sharply defined focus. Designed specifically for lab applications requiring precise scientific work. Useful in inspection, quality control, electronics, sample examination and biological analysis. The viewing area of 4 x 2 1/2" is easy on the eyes. The lens provides a crisp and distinct image with vivid enhancement of surface details. The sliding shutter cover protects the lens from dust and scratches. Steel extender (36") with flexible wrist performs like a robot arm in zero gravity. Spring counterbalance permits smooth movement and superior stability. Control knobs permit locking in place. Convenient front handle provides control to raise, lower and pivot the magnifier wherever desired.

60 W incandescent bulb is included.

6385M33 2X MAGNIFIER LAMP \$62.74

Chemicals and Reagents

The red-edged section of the catalog, in the back of the book, contains our selection of reagents arranged in alpha-numeric sequence. The reagents and chemicals listed are those which we have found to be the most frequently required for routine laboratory use; these are normally carried in our stock for immediate shipment.

If you require a product not listed in our catalog, call and let us know what your needs are. We can deliver over 20,000 reagents from America's foremost chemical manufacturers, and we will be happy to fill your order promptly and efficiently.



PANASONIC

100X LIGHT SCOPE

Superior optics with a built-in beam

- Rack and pinion focus
- Battery powered

"Switch less" on/off - Just open light scope and focus; when finished, close. It's simple, ease-of-use, sturdy rack and pinion focusing mechanism with built-in blue filter optimizes focal clarity. Rugged ABS plastic housing withstands rigorous field use.

Dimensions: 5.5 x 2.0 x 0.9 inches, weight, 68 g.



6385M43

6385M43	LIGHT SCOPE 100X	\$90.15
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MAGNIFICATION LAMP

Ideal for assembly, inspection and soldering applications

- Fluorescent ring lamp
- Permanent optical quality glass lens provides 4 diopters of magnification and is 33% stronger than other similar ring magnifiers

18 watt circline lamp provides even light distribution to the work surface and 12,000 hours rated lamp life.

Spring-loaded base contributes to the adjustability of the luminaire. Includes permanent magnification lens, circline lamp, built-in ballast, 6' cord with grounded plug and lens cover.



6385M72

6385M72	MAGNIFIER LAMP, 120 V	.....	\$243.36
6385M74	MAGNIFIER LAMP, 220 V	.....	197.00
6385M82	LAMP, 18 Watt	.....	23.00

MEGAVIEW LOUPE

Allows peripheral vision

- Light and comfortable
- Wide binocular lens
- Can be worn over glasses

Includes 3 interchangeable lenses. Additional 1.7X optional. For added flexibility, Megaview Pro Light, which provides 1.7X, 2X, 2.5X and 4X magnification, is also available.



6385M96

6385M93	MEGAVIEW, w/2, 2.5, 3.0X Magnification	.....	\$63.95
6385M94	MEGAVIEW, w/1.7, 2, 2.5, 3.0X Magnification	.....	72.50
6385M95	MEGAVIEW PRO LIGHT, w/1.7, 2, 2.5, 4.0X Magnification	.....	75.95

BAUSCH & LOMB

MAGNA VISOR

Available in three different magnifications



6385N21

- Quality optics
- Contemporary molded frame
- Comfortable and washable padding

Visor is suitable for use in heavy-duty industrial applications. Acrylic lenses are easy to remove for cleaning. Lenses are available in focal lengths of 6" (2.75X), 8" (2.5X) and 12" (1.9X). ErgoTouch™ headband provides hours of comfort.

6385N01	VISOR MAGNIFIER w/ 12" (1.9X) lens	.....	\$37.90
6385N03	VISOR MAGNIFIER w/ 8" (2.5X) lens	.....	37.90
6385N05	VISOR MAGNIFIER w/ 6" (2.75X) lens	.....	37.90
6385N07	LENS, 12" (1.9X)	.....	13.64
6385N09	LENS, 8" (2.5X)	.....	13.64
6385N11	LENS, 6" (2.75X)	.....	13.64

TELE-MICROSCOPE

Mirrors and coated optics give a superior field of view



6385N12

- Fixed focus with adjustable pupillary distance
- Extremely lightweight
- Four separate nose adjustments for height and comfort
- Adjustable headband

The Tele-Microscope offers working distances of 10", 13" and 17", with 5.5X and 4.0X magnification. Case included.

Wide range: P.D. 50 to 80 mm. Wide Field: 12". Weight: 3.0 ounces.

6385N12	TELE-MICROSCOPE, 5.5X, 17"	\$740.00
6385N13	TELE-MICROSCOPE, 5.5X, 13"	740.00
6385N14	TELE-MICROSCOPE, 5.5X, 10"	740.00
6385N15	TELE-MICROSCOPE, 4.0X, 17"	740.00
6385N16	TELE-MICROSCOPE, 4.0X, 13"	740.00

DONEGAN OPTICAL

VISORLIGHT™

Illuminates magnified viewing area



6385N17

- 5 to 6 hours battery life
- Hands-free use
- 6000 candlepower Xenon laser beam

Easily clips on most visors or eyeglass frames.

6385N22	VISORLIGHT, With Battery Pack, 10 Inch Cord	\$18.50
6385N17	VISORLIGHT, With Battery Pack, 42 Inch Cord	18.50
6385N20	VISORLIGHT REPLACEMENT BULB	5.60

SCREW CAP SPECIMEN MAILERS

Gorpak Fiberboard Mailers™



6390N15

- Of heavy fiberboard with metal bottom, metal threading at top and metal screw cap
- Without bottle
- Listings give nominal capacity of bottle which mailer will take
- Case contains 24 mailers

SPECIMEN MAILERS

THOMAS NO.	FOR BOTTLE CAPACITY	I.D. x DEPTH (mm)	O.D. x OVERALL HEIGHT (mm)	PRICE
6390N15	1 oz. (30 ml.)	37 x 92	48 x 97	\$69.70
6390N25	2 oz. (60 ml.)	44 x 111	55 x 116	72.80
6390N35	4 oz. (125 ml.)	50 x 136	61 x 141	74.00
6390N45	8 oz. (250 ml.)	64 x 160	73 x 167	87.00

Double Tube Mailers for bacteriological samples



6391D30

- Each mailer consists of an inner aluminum container and outer fiber container, both with screw cap
- Aluminum containers are autoclavable, and cap is lined to prevent leakage
- As required by postal law for mailing etiologic agents or biohazardous specimens
- Conform with Interstate Quarantine Regulations (42 CFR, Part 72.25) for etiologic agents when appropriate labeling and absorbent packing materials are used

BACTERIOLOGICAL SAMPLE MAILERS

THOMAS NO.	I.D. x OVERALL HEIGHT, outer tube	O.D. x OVERALL HEIGHT, inner tube	QUANTITY	PRICE
6391D10	51 x 95	44 x 87	Pk. 10	\$43.85
6391D14			Cs. 50	219.25
6391D30	51 x 127	44 x 121	Pk. 10	41.15
6391D34			Cs. 50	208.75
6391D70	56 x 146	51 x 140	Cs. 24	154.40
6391D90	32 x 171	25 x 162	Pk. 10	41.50
6391D94			Cs. 50	207.50
6391E20	44 x 178	32 x 162	Cs. 24	126.15
6391E38	67 x 159	64 x 163	Each	9.19
6391E40			Cs. 24	218.40

HAZARDOUS MATERIAL MAILERS

Hazardous Single Shipper packages contain everything needed to ship certain corrosives, flammables, poisons and other hazardous substances exempted by DOT

- 275 lb. test double wall carton
- 275 lb. test double wall insert and top and bottom pads
- 32 oz. safety-coated, wide mouth glass jar with Teflon[®]-lined cap

NOTE: check the latest DOT standards for applicability.



6391E50

6391E50 SHIPPER, Hazardous Materials \$5.70

Hazardous Xtra Shipper with can

Includes:

- 275 lb. test double wall pre-printed carton
- 275 lb. test double wall liner
- 1 gallon can
- Vermiculite pads
- Poly bag liner
- 16 oz. or 32 oz. safety-coated wide mouth clear or amber glass jar with Teflon-lined cap



6391E66

NOTE: check the latest DOT standards for applicability.

6391E66 SHIPPER, Clear Jar, 32 oz. \$21.45
 6391E68 SHIPPER, Clear Jar, 16 oz. 20.15
 6391E70 SHIPPER, Amber Jar, 32 oz. 20.54
 6391E72 SHIPPER, Amber Jar, 16 oz. 21.15

Foam Sleeves for Vials and Bottles

- Designed for a variety of sample containers
- Made of gray foam and available in three configurations.



6391E90

Model 6391E90 is designed to hold a one gallon bottle. Sleeve consists of three layers (each approximately 6" high) and has a star-shaped container cavity. Model 6391E92 is designed to hold four 16 ounce bottles. Container cavities are star-shaped and there is a slot for holding a cold pack (6391E96). Model 6391E94 is designed to hold 20 vials and a cold pack.

6391E90 1 STAR SLEEVE for 1 Gal. Bottle \$5.40
 6391E92 4 STAR SLEEVE for 4 x 16 oz. Bottles 5.40
 6391E94 VIAL HOLDER 5.40
 6391E96 COLD PACK 4.20

NALGENE

PASSPORT[™] BOTTLE SHIPPER SYSTEMS

Pre-tested UN combination packaging systems



6391F35

- Designed for shipping hazardous materials
- Certified for packaging group 1
- Meets U.S. And international transportation standards
- Not to be used under pressure or vacuum

Shipping systems are constructed with high-density polyethylene. Polypropylene screw closures, corrugated over-pack, polyethylene bag, self-locking nylon cable tie and closure tape complete the construction. They are used to ship materials that have a specific gravity of 2.0 or less and require hydrostatic testing verification of up to 15 psi. Narrow mouth and wide mouth sizes are available.

6391F47 PACK SYSTEM NARROW MOUTH BOTTLE, 250 mL, Cs 4 \$34.44
 6391F49 PACK SYSTEM NARROW MOUTH BOTTLE, 500 mL, Cs 4 47.99
 6391F51 PACK SYSTEM NARROW MOUTH BOTTLE, 1000 mL, Cs 4 51.28
 6391F53 PACK SYSTEM NARROW MOUTH BOTTLE, 4000 mL, Cs 4 33.94
 6391F55 PACK SYSTEM WIDE MOUTH BOTTLE, 250 mL, Cs 4 35.90
 6391F57 PACK SYSTEM WIDE MOUTH BOTTLE, 500 mL, Cs 4 54.70
 6391F59 PACK SYSTEM WIDE MOUTH BOTTLE, 1000 mL, Cs 4 58.17
 6391F61 PACK SYSTEM WIDE MOUTH BOTTLE, 125 mL, Pk 4 45.01
 6391F63 PACK SYSTEM WIDE MOUTH BOTTLE, 250 mL, Pk 4 51.64
 6391F65 PACK SYSTEM WIDE MOUTH BOTTLE, 500 mL, Pk 4 71.99
 6391F67 PACK SYSTEM WIDE MOUTH BOTTLE, 1000 mL, Pk 4 93.98

DRY ICE MAILERS

Boxes for storage and shipment



6391F70

- For short-term storage of ice, dry ice, liquid nitrogen, frozen samples, etc., as well as for shipment of materials requiring dry-ice packing
- Efficient insulation provided by expanded polystyrene walls, encased in sturdy fiberboard shell with close-fitting lid

Wall thickness of 6391F70 and F78: 38 mm; of 6391F80, F85 and F90: 51 mm; and of 6391F95: 64 mm.

Strap is included with 6391F80. Dry ice capacities given in listings.

SPECIFICATIONS

THOMAS NO.	INSIDE DIMENSIONS, L x W x H (mm)	OUTSIDE DIMENSIONS, L x W x H (mm)
6391F70	292 x 247 x 235	366 x 323 x 311
6391F78	273 x 190 x 286	349 x 266 x 342
6391F80	305 x 305 x 292	407 x 407 x 394
6391F85	425 x 425 x 320	527 x 527 x 422
6391F90	425 x 425 x 397	527 x 527 x 499
6391F95	587 x 359 x 584	714 x 486 x 711

6391F70	DRY ICE BOX, 30 lbs.	\$31.30
6391F78	DRY ICE BOX, 30 lbs., Cs. 8.	139.05
6391F80	DRY ICE BOX, 50 lbs.	48.05
6391F85	DRY ICE BOX, 100 lbs.	73.90
6391F90	DRY ICE BOX, 135 lbs.	86.15
6391F95	DRY ICE BOX, 235 lbs.	119.40

QORPAK

HAZARDOUS MATERIAL SHIPPERS

Complete kits for shipping liquids or solids



6391G05



6391G17

- Meet new UN and D.O.T. HM-181 regulations. Certified UN performance tested.

DOT-E 9168 Shippers

No hazard label required for domestic shipments via ground or air cargo. For Class 6.1 poisons, corrosives or flammables. Labeled three ways to facilitate UPS and international shipments: DOT-E 9168, DOT-12A and UN 4G/X 4/S/92. Plastic-coated narrow or wide mouth bottles included. Use for ICAO/IATA air cargo and IMO for ocean freight shipments with proper exterior warning labels.

Narrow Mouth Bottles

6391G05	SHIPPER, 4 oz., Cs. 4	\$67.40
6391G08	SHIPPER, 8 oz., Cs. 4	79.40
6391G11	SHIPPER, 16 oz., Cs. 4	136.00
6391G14	SHIPPER, 32 oz., Cs. 4	136.33

Wide Mouth Bottles

6391G17	SHIPPER, 4 oz., Cs. 4	\$70.20
6391G20	SHIPPER, 8 oz., Cs. 4	75.45
6391G23	SHIPPER, 16 oz., Cs. 4	145.00
6391G26	SHIPPER, 32 oz., Cs. 4	152.00

NOTE: 4-pack versions available. Call for more information.

4G Combination Shippers

Combination package for paint shipments or use as overpack for containers that have not passed an internal pressure test. Have metal overlap on cans, included. For liquids or solids — use your own internal container. Labeled UN 4G/Y 7.7/S/92 and DOT-12A. Requires external labels.

6391G50	SHIPPER, 1 gal., Unltd, Cs. 4	\$109.00
6391G53	SHIPPER, 1 gal., Plain, Cs. 4	150.00
6391G56	SHIPPER, 1 gal., Painted, Cs. 4	62.17
6391G59	SHIPPER, 1 gal., Painted, 2-Pak, Cs. 4	111.00

NOTE: any substitutions in supplied package materials will invalidate package compliance. Customer must determine that the bottle and closure are compatible with the product they are shipping.

DRY ICE MAILERS

Thermoseal® Multi-Purpose

- Polystyrene foam mailers for shipment of materials requiring refrigeration
- Walls 38 mm (1½") thick
- Need less than 1.4 kg (3 lbs) dry ice to keep samples refrigerated for 24 hours at normal ambient temperatures



6391H27

With corrugated cardboard mailer. Available in four sizes.

SPECIFICATIONS:

THOMAS NO.	INSIDE DIMENSIONS L x W x H, mm (in.)	OUTSIDE DIMENSIONS L x W x H, mm (in.)
6391H27	203 x 152 x 102 (8 x 6 x 4) ^{1/4}	290 x 229 x 189 (11 x 9 x 7) ^{3/8}
6391H54	292 x 247 x 225 (12 x 10 x 9)	383 x 292 x 203 (15 x 11 x 8)
6391H55	203 x 152 x 228 (8 x 6 x 9)	290 x 229 x 305 (11 x 9 x 12)
6391H58	203 x 152 x 305 (8 x 6 x 12)	279 x 229 x 381 (11 x 9 x 15)

6391H27 MAILER, Co. 12 \$106.80

6391H54 MAILER, Co. 6 \$4.30

6391H55 MAILER, Co. 8 \$1.25

6391H58 MAILER, Co. 8 \$5.00

Thermoseal® Bottle Shipper

- Lightweight, reusable
- Meets DOT-33A specifications
- Plastic foam provides cushioning and insulation
- No outer carton necessary
- Bottle cavity dimensions 3½" diameter x 8 ½" high



6391H70

6391H70 SHIPPER, 1 Quart, Co. 50 \$70.35

VIAL SAMPLE SHIPPERS

40 mL Vial Shipper

- Use with VOA type sample vials (Thomas numbers 9711E62 through F30) and others
- Protects samples in 40 mL vials from damaging temperatures and breakage due to impact and vibration



6391H80

- Fabricated ethafoam insert secures up to 12 vials within insulated container
- Seamless, molded, expanded polystyrene insulation
- Shipper is enclosed in a 200-lb. test corrugated carton
- Supplied with a 24-oz reusable refrigerant gel pack, formulated to freeze at +30°F; fits above samples to extend low-temperature holding times for up to 48 hours
- Shipper is reusable

Dimensions: inside - 8 x 6 x 7 inches high; outside - 11 x 9 x 10 inches high. Wall is 1 in. thick. Shipping weight is less than 3 lbs.

6391H80 SHIPPER, 40 mL, Vials, Co. 8 \$114.70

Test Tube Shipper/Rack

- Unique design allows for use as rack or shipping container
- Holds 48 tubes
- For use as temperature-safe shipper, use 6391H87 Carton and 6106C13 Refrigerant Pack
- Measures 330 x 127 x 100 mm (13 x 5 x 4 in.)



6391H85

6391H85 SHIPPER/RACK, Co. 12 \$53.05

6391H87 MAILING CARTON, Co. 12 \$9.80

I-CHEM

FIELD-TEMP™ COOLER THERMOMETER

Ideal for use in environmental shipping coolers



6391H94

- Each thermometer is provided with a Certificate of NIST traceability

A mercury-free thermometer that is located inside an I-CHEM 40 mL or 60 mL vial filled with deionized water. Available in two different ranges. Traceable, and is engraved with a unique serial number traceable to NIST standards and for tracking purposes.

6391H94 COOLER THERMOMETER, -10 TO +20°C \$23.50

6391H96 COOLER THERMOMETER, -20 TO 100°C 26.65

DRY ICE STORAGE CHEST

Capacity 235 lbs. (107 kg) dry ice



6391J12 shown with 0785445 Dolly (not included)

- Partially filled, the chest makes an excellent low-temperature storage unit for low boiling materials prior to fractionation by distillation or gas chromatography
- Inner and outer walls are molded of rugged ABS plastic, insulated with 84 mm of expanded polystyrene
- Chamber is 584 x 356 x 584 mm high; chamber volume is 5 cu. ft.
- Lid is hinged at back and has locking hinge on side which can be used to hold lid open
- With nickel-plated handles and latches

Overall dimensions 711 x 483 x 711 mm deep. Net weight 18 kg.

6391J12 DRY ICE CHEST \$722.00

DRY ICE STORAGE CHEST

Capacity 90 lbs. dry ice



6391J22

- Has 51 mm thick insulation
- Corrosion-resistant, zinc plated hardware
- Chamber is 406 x 368 x 318 mm high; overall 508 x 47 x 419 mm, chamber volume is 1.6 cu. ft.
- Net weight 18 kg

Chest can hold 90 lbs. of dry ice for over six days. Insulation is protected by tough polyethylene interior and exterior shell. A hinged lid and lid-stay provide convenient loading and unloading of chest.

6391J22 DRY ICE CHEST \$321.00

Double Warranty Protection

When you buy your laboratory instruments from us, you are protected in two ways. First, by the manufacturer's warranty and second, by the **Exclusive Thomas Scientific One Year Warranty** (see the introduction for details).

The **Thomas Warranty** provides that all instruments sold by us will be free from defects in materials and workmanship for one year from the date of our invoice to the buyer. We guarantee complete satisfaction products purchased from Thomas Scientific.

SAFETY MAILER SYSTEMS

Simple, ready-to-use components for shipping blood, serum and other diagnostic materials

In compliance with current transport regulations:

- Approved by the U.S. Postal Service and major couriers
- Meets IATA Packaging Instruction 650

Model 472 Complete 8-tube System



6391L40

- Separate cavities for up to eight 7-10 mL specimen tubes and a 30 mL bottle
- Offers space to accommodate materials for insurance testing or other paperwork

Consists of all components required for transporting clinical specimens, including foam mailer molded of leak resistant expanded polystyrene with tight fitting lid.

System includes: absorbent material, waterproof tape, press-lock poly bag, shipping carton and instruction sheet.

6391L40 SAFETY MAILER SYSTEM, 8-tube, Cs. 30 \$152.30

Model 473 Complete 3-tube System

- Separate cavities for up to three 7-10 mL specimen tubes

Consists of all components required for transporting clinical specimens, including foam mailer molded of leak resistant expanded polystyrene with tight fitting lid.

Includes: absorbent material, waterproof tape, press-lock poly bags, shipping carton and instruction sheet to assemble 50 complete 3-Tube mailers.

6391L60 SAFETY MAILER SYSTEM, 3-tube, Cs. 50 \$94.45



6391L60

MERCURY MANOMETER

- Range 1-150 mm absolute pressure
- Closed-end, U-tube type; mercury-filled, ready for use
- Mounted on stable base; glass-jacketed for protection

Scale graduated 0 to 75 mm in 1 mm divisions, upward and downward from mid-scale zero; reading taken as sum of readings in both directions. Lower arm open to chamber formed by glass jacket; chamber under vacuum in use. Constriction retards mercury surge when vacuum is released. Metal base, 127 mm diameter; tubulations on base take 1/8" tubing. Overall height, 279 mm.



6395J10

6395J10 MANOMETER, 1-150 mm \$201.00

TESTO®

DIGITAL MANOMETER

- One touch zeroing
- Integrated magnetic holder
- Measures pressure in combustion chambers
- Monitors differential pressure in filters

The electronic pressure cell which measures and displays differential pressures up to +/-50 inch H₂O, psi. Small and compact, this pocket-sized instrument fits inside a toolbox. Auto/OFF function with inch psi H₂O, psi and mbar. Includes connection hoses, magnetic holder, battery and instruction manual.



6395J12

6395J12 MANOMETER, Digital to 52", mbar, inch H₂O, psi \$99.00

6395J14 NIST CALIBRATION CERTIFICATE 150.00

FACE MASKS WITH TIES

For use in any situation where sanitation and protection are necessary

- Comfortable - enclosed, moldable nosepiece for a secure fit
- Non-allergenic ties and bindings; proper placement of folds
- All masks feature a Bacterial Filtration Efficiency (BFE) of over 95%



Available in cases of 300 (6 packs of 50). **6399C10**

6399C10 SURGICAL MASKS w/ TIES, Cs. 300 \$80.00

HEAT PROOF BENCH MAT

Flexboard II



- Thickness 3 mm
- Usable for protecting laboratory benches or in place of wire gauze for heating over an open flame
- Made of calcium silicate fiber
- Withstands temperatures up to 1,260°C

6406L05

6406L05	BENCH MAT, 11 x 11 in.	.....	\$58.95
6406L20	BENCH MAT, 14 x 24 in.	.....	110.00

PROTECTIVE BENCH COVERS

Bytac® Overlay



- Teflon® FEP film, 1 mil (0.03 mm) thick, with pressure-sensitive adhesive on foil or vinyl backing
- Can easily be cut to shape with scissors or knife
- Teflon surface is highly resistant to chemicals; not usable with perchloric acid

6406L60

6406L60 has 2 mil (0.05 mm) thick foil backing; usable at temperatures to 360°F (182°C). 6406L70 has 8 mil (0.2 mm) thick vinyl backing; usable at temperatures to 200°F (93°C). Furnished in roll 25" (635 mm) wide x 5 yards (4.6 m) long.

6406L60	BENCH COVER, Foil Back, RL	.....	\$270.25
6406L70	BENCH COVER, Vinyl Back, RL	.....	229.29

BENCH/DRAWER MATS

Polyethylene Matting, Covamal®



- Clear, ribbed matting for lining laboratory tables, shelves and trays
- In rolls 760 mm wide x 15 meters long
- Thickness 0.25 mm; with 0.76 mm thick ribs
- Easily cut with scissors

6406N15

6406N15	POLYETHYLENE MATTING, 15m RL	\$94.99
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NALGENE

BENCH/DRAWER LINERS

Polyethylene Foam "Clean Sheets"™



6406T20

- Naige 6283
- For lining benches, shelves and drawers
- Closed-cell, cross-linked, polyethylene foam, 1/4-inch thick, produces a resilient, protective, nonabsorbent work surface
- Matte-white finish
- Both sides usable
- 50-foot rolls can be cut to size

- Can be stapled, tacked or taped to surface

Offered in 12" (305 mm), 18" (457 mm) and 30" (762 mm) widths. Meets OSHA Standard 29 CFR Part 1910.1030 for use as protection against blood borne pathogens.

6406T20	FOAM MATTING, 12 in. x 50 ft, RL	.....	\$82.46
6406T22	FOAM MATTING, 12 in. x 50 ft, Cs. 2	.....	184.91
6406T36	FOAM MATTING, 16 in. x 50 ft, RL	.....	133.85
6406T32	FOAM MATTING, 16 in. x 50 ft, Cs. 2	.....	267.89
6406T40	FOAM MATTING, 30 in. x 50 ft, RL	.....	216.13
6406T42	FOAM MATTING, 30 in. x 50 ft, Cs. 2	.....	432.26

NEOTEX® MATS

Synthetic Rubber, Open Mesh



6407M20

- Neoprene-coated fiber web
- Approximately 5 mm thick, with 9.5 mm, diamond-shaped openings
- Durable, flexible and chemically resistant
- Can be boiled or autoclaved
- Countless applications in the laboratory for reducing breakage, scratching and noise of handling glassware and instruments

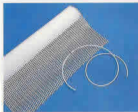
- 26" (660 mm) width; 50-foot (15.2-m) long rolls

6407M20	NEOTEX MATTING, Green, 10 ft	.....	\$35.90
6407M12	NEOTEX MATTING, Green, 50 ft RL	.....	178.00
6407M21	NEOTEX MATTING, Black, 10 ft	.....	35.90
6407M24	NEOTEX MATTING, Black, 50 ft RL	.....	178.00

TEFLON® BENCH MATS

Useful as a resilient lining material

- Teflon TFE
- Diamond-shaped mesh sheeting, 1.6 mm thick, with 6.4 mm openings
- Suited to fabricate bags for submersing parts in corrosive chemicals or solvents
- Stretchable
- Can be boiled or autoclaved
- Rolls are 12 inches wide x 10 feet long



6407990

6407990 TEFLON MATTING, 10 ft. R. \$251.47

ANTI-FATIGUE, HYGIENIC FLOOR MATS

Minimize discomfort of prolonged standing

- Heavy-duty rubber fixed to 9.5 mm thick, flexible, closed-cell foam rubber base
- Supply effective insulation against cold floors
- Marble-patterned rubber cover; beveled edges
- Total thickness, 12 mm



6407215

2 x 3 ft Mats

6407015	FLOOR MAT, Black/White	86.00
6407019	FLOOR MAT, White/Beige	68.00

1.5 x 4 ft Mats

6407040	FLOOR MAT, Black/White	57.00
6407044	FLOOR MAT, White/Beige	70.00

NOTE: other colors and sizes available on special order.

FLOOR MATTING

Anti-Fatigue

- Ribbed vinyl plastic, bonded to resilient under layer of nonabsorbent, closed-cell vinyl sponge
- Reduces discomfort of prolonged standing
- Provides secure traction in wet areas
- Useful also on benches as well as floors, as a cushioning cover to protect glassware
- Durable and chemical resistant; nonconductive



6407930

Total thickness 13 mm. Supplied 2 feet (0.61 m) wide x 5 feet (1.5 m) long. Can be cut to desired size with heavy shears.

6407930 FLOOR MATTING, 2 ft. x 5 ft. \$66.00

Poly-Tack, Decontamination, Disposable

- For use in clean room environments where foot-borne dirt can cause contamination
- Each mat consists of 30 sheets of polyethylene film coated with tacky adhesive to trap particulate matter
- As each sheet becomes saturated with dirt, it is peeled off to reveal fresh tacky surface on the sheet below
- Sheets are 3 mils thick



6407530

Bottom sheet has four 51 mm wide strips of PVC tape with self-adhesive backing for securing mat to floor. Offered in choice of two colors, white or blue, each in four sizes: 18 x 36 inches (457 x 914 mm), 36 x 36 inches (914 x 914 mm), 18 x 45 inches (475 x 1143 mm) and 36 x 45 inches (914 x 1143 mm).

36-inch-wide Mats

6407936	FLOOR MAT, 18 x 36, White, Cs. 4	574.00
6407935	FLOOR MAT, 18 x 36, Blue, Cs. 4	71.00
6407940	FLOOR MAT, 36 x 36, White, Cs. 4	148.00
6407945	FLOOR MAT, 36 x 36, Blue, Cs. 4	148.00

45-inch-wide Mats

6407990	FLOOR MAT, 18 x 45, White, Cs. 4	535.00
6407995	FLOOR MAT, 18 x 45, Blue, Cs. 4	85.00
6407980	FLOOR MAT, 36 x 45, White, Cs. 4	198.00
6407985	FLOOR MAT, 36 x 45, Blue, Cs. 4	198.00

FLOOR MATTING

Anti-static, anti-fatigue



- Black textured rubber permanently bonded to 9.5 mm thick, resilient, closed-cell foam rubber base
- Designed to significantly reduce electrostatic discharge: minimal electrical resistance 25,000 ohms
- Durable and chemically resistant

6407X15

Total thickness 11.5 mm; dimensions, 1.5 x 4 ft. with beveled edges. Other sizes available on special order.

6407X15 FLOOR MAT \$70.00



PLASTIC RULERS

Transparent Plastic



6410R12

- Economical
- Useful for measurements of chromatographic spots or electrophoretic bands without obscuring the surface
- Flexibility permits measurement of curved surfaces or plotted curves
- Metric scale is graduated in millimeters; English scale in $\frac{1}{16}$ " divisions
- Markings sealed between laminations; cannot wear off

6410R12 RULE, 6-inch, 15 cm, Pl. 12 \$10.25

6410R22 RULE, 12-inch, 30.5 cm, Pl. 12 15.50

MTI

STEEL RULERS



6410K12

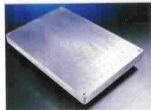
- With English and metric scales
- Made of rustless steel
- English side: $\frac{1}{16}$ ", $\frac{1}{32}$ " and $\frac{1}{64}$ " divisions; Metric side: 0.5 and 1 mm divisions

6410K12 RULE, 150 mm, 6-inch \$16.00

6410K22 RULE, 300 mm, 12-inch 29.50

VACUUM PLATES

For accurate wet film applications



6410R80

- Precision-ground, plain surface
- Can be bolted or clamped to work bench

Plate holds the material to be coated (charts, foils, etc.) firmly in position. Rigid plate is a hollow aluminum casting. Suction holes are $\frac{3}{16}$ " and 1" apart.

Plate may be operated from a shop vacuum line, laboratory vacuum pump or water aspirator. Plates have a $\frac{3}{8}$ " o.d., barbed hose fitting. Available in two sizes.

6410R80 VACUUM PLATE, 8" x 12" \$425.00

6410R83 VACUUM PLATE, 12" x 18" 725.00

MCD INDUSTRIES

BIRD® APPLICATORS

For drawing down wet films of materials in predetermined thicknesses



6410S01

- High grade, bar steel with corrosion resistant, nickel chrome finish
- Precision ground to extremely fine tolerances for exact color, gloss and performance evaluations
- Conform to ASTM D 2486 (special order), D 3258, D 3265, D 333 and D 823

Use in conjunction with paper charts, hiding power charts, plate glass or any other smooth flat surface. The wet film thickness is the nominal film thickness of the coating when drawn down. It is approximately one half of the cut or actual gap clearance of the applicator. The wet film thickness is engraved on the end of the bar. Other sizes are available on special order.

Applicators are also available in steel, 304 stainless steel and 410 stainless steel on special order.



Thomas Tips

How to Select an Applicator

When selecting an applicator, you will need to consider both the desired wet film and dry film thickness.

Wet film thickness is dependant on the type of applicator selected. Using a bar or bird-type applicator with a flat edge will yield a wet film thickness of up to 50% less than the gap size of the applicator; see Thomas number series 7295806. Using an applicator that has a sharp edge, such as 7295C30 or 6410T65/T68, will yield a wet film thickness very close to the gap setting.

When estimating the desired dry film thickness, you will need to take into consideration the liquid-to-solid content. 50% of solids will leave a dry film thickness that is approximately half of the wet film thickness.

BIRD APPLICATORS

THOMAS NO.	OVERALL WIDTH	FILM WIDTH	CUT	WET FILM THICK-MARK	MARK-MILE	PRICE
6410S01	3 1/2"	2"	0.001	0.0003"	1/2	\$158.70
6410S03	3 1/2"	2"	0.003	0.0015"	1 1/2	158.70
6410S05	3 1/2"	2"	0.004	0.002"	2	158.70
6410S07	3 1/2"	2"	0.006	0.003"	3	158.70
6410S09	3 1/2"	2"	0.012	0.006"	6	158.70
6410S11	4 1/2"	3"	0.001	0.0005"	1/2	165.00
6410S13	4 1/2"	3"	0.002	0.001"	1	165.00
6410S15	4 1/2"	3"	0.003	0.0015"	1 1/2	165.00
6410S17	4 1/2"	3"	0.004	0.002"	2	165.00
6410S19	4 1/2"	3"	0.006	0.003"	3	165.00
6410S21	4 1/2"	3"	0.012	0.006"	6	165.00
6410S23	5"	3 1/2"	0.001	0.0005"	1/2	171.40
6410S25	5"	3 1/2"	0.003	0.0015"	1 1/2	171.40
6410S27	5"	3 1/2"	0.004	0.002"	2	171.40
6410S29	5"	3 1/2"	0.006	0.003"	3	171.40
6410S31	5"	3 1/2"	0.010	0.005"	5	171.40
6410S33	5"	3 1/2"	0.012	0.006"	6	171.40
6410S35	5"	3 1/2"	0.020	0.010"	10	171.40
6410S37	7 1/2"	6"	0.001	0.0005"	1/2	190.40
6410S39	7 1/2"	6"	0.002	0.001"	1	190.40
6410S41	7 1/2"	6"	0.003	0.0015"	1 1/2	190.40
6410S43	7 1/2"	6"	0.004	0.002"	2	190.40
6410S45	7 1/2"	6"	0.006	0.003"	3	190.40
6410S47	7 1/2"	6"	0.007	0.0035"	3 1/2	190.40
6410S49	7 1/2"	6"	0.007	0.0035"	3 1/2	190.40
6410S51	7 1/2"	6"	0.008	0.004"	4	190.40
6410S53	7 1/2"	6"	0.009	0.0045"	4 1/2	190.40
6410S55	7 1/2"	6"	0.012	0.006"	6	190.40
6410S57	7 1/2"	6"	0.016	0.008"	8	190.40
6410S59	7 1/2"	6"	0.020	0.010"	10	190.40
6410S61	7 1/2"	6"	0.024	0.012"	12	190.40
6410S63	7 1/2"	6"	0.030	0.015"	15	190.40
6410S65	7 1/2"	6"	0.040	0.020"	20	190.40

SHEEN

AUTOMATIC FILM APPLICATOR

Allows consistent and reproducible drawdowns between operators by controlling the speed and applied pressure



6410T40

- Hands-free operation
- Meets ASTM D 823 requirements
- Six preset speeds from 4 to 25 cm/second are controlled by a six position switch

Unit features a built-in vacuum bed, internally positioned for two 25 x 18 cm suction areas and an electrically powered, variable speed motor. Can use a wide range of applicators: Bird, sag index, sagging and leveling testers, wire bar coaters and many others. Mechanical clips hold test panels or charts to the 47 x 35 cm flat bed. Draw down length is user selectable between 10 to 37.5 cm. Two guide bars draw the applicator down the test panel. When complete, a tray collects the applicator and any excess material.

Dimensions: 760 x 530 x 230 mm; Weight: 41 kg. Wire Bar Attachment Kit (Thomas number 6410T45) allows use of Wire Bar Applicators (Thomas 7295075 series) specific for this instrument.

NOTE: not suitable for explosion risk areas.

6410T40	AUTOMATIC FILM APPLICATOR, Electric, with Vacuum Bed	\$6,947.99
6410T45	WIRE BAR ATTACHMENT KIT	976.00

SHEEN

MICROMETER ADJUSTABLE FILM APPLICATOR

Adjustable wet film applicator is ideal for optimizing wet film thickness to develop new product specifications



6410T50

- User calibratable instrument ensures precise results and helps prevent down time
- Aluminum frame, stainless steel blade
- Accuracy: $\pm 2 \mu\text{m}$

Two micrometer heads allow for accurate adjustment of knife blade within range of 0-13 mm in 0.01 mm (10 μm) increments. Precision ground stainless steel blade slides vertically in slots. Springs exert upward pressure on blade maintaining contact with micrometer heads allowing for exact adjustments. Base frame is manufactured of high quality anodized aluminum; end sections provide stability, also serve as hand grips. Non-standard widths available on special order. Dimensions: 580 x 480 x 190 mm; weight 1.0 kg.

6410T50	FILM APPLICATOR, 10 cm Film Width	\$322.00
6410T58	FILM APPLICATOR, 15 cm Film Width	632.00

SHEEN

FINENESS OF GRIND GAUGES

Superior quality gauges are an ideal tool in paint or ink production for particle size determination



6410U15

- Conforms to ASTM D 1210, ISO 1524 and BS 3900 C6
- Each block consists of hardened stainless steel and scraper bar

Particle size affects film appearance in respect to color, opacity and gloss and grinding affects particle size. Determining minimum grinding time necessary, saving expensive production hours. Also used for optimization of grinding equipment and for comparison of pigment sources. Dimensions: 175 x 63 x 13 mm. Any scale or depth is available on special order. Single and double channel gauges have channels that are each 12.5 mm wide. Wide channel gauge has a 37 mm wide channel. Model 6410U50 allows viewing foreign matter (paint skin, agglomerates, etc.) while also determining fineness of grind.

6410U75	FINENESS OF GRIND GAUGE, 0 to 25 μm Film Thickness	\$344.00
6410U10	DOUBLE CHANNEL GAUGE, 0 to 50 μm Film Thickness	344.00
6410U15	DOUBLE CHANNEL GAUGE, 0 to 100 μm Film Thickness	344.00
6410U30	SINGLE CHANNEL GAUGE, 0 to 50 μm Film Thickness	344.00
6410U35	SINGLE CHANNEL GAUGE, 0 to 100 μm Film Thickness	344.00
6410U50	WIDE SINGLE CHANNEL GAUGE, 0 to 100 μm Film Thickness	512.00
6410U50	SCRAPER BLADE	86.00

Let us quote your next order!

Our trained telephone representatives can help you select the products you need and provide a competitive price quote. We can suggest the best buying quantities for maximum savings. Our experienced quotations staff has immediate access to over 250,000 competitively-priced instruments, supplies and reagents.



Thomas Scientific

SHEEN

BLACK AND WHITE
CRYPTOMETER

Simple, fast opacity testing of wet film, for determination of required coating thickness



6410V80

- Easy to use
- Coverage or spreading power is calculated from a conversion chart

To use, place a blob of paint in the middle of the glass base plate and press the top plate down. Scale marked on base shows how thick paint has to be to cover the black/white division.

Glass base is divided into black and white sides. Top plate has set wedge angles of $K = 0.002$ Dark or 0.007 Light (included). Plates with wedge angles of $K = 0.0035$, 0.004 and 0.008 are available below.

6410V80	BLACK AND WHITE CRYPTOMETER	\$800.00
6410V90	CRYPTOMETER PLATE, 0.002 Wedge Angle	128.00
6410V93	CRYPTOMETER PLATE, 0.0035 Wedge Angle	128.00
6410V96	CRYPTOMETER PLATE, 0.004 Wedge Angle	128.00
6410V99	CRYPTOMETER PLATE, 0.007 Wedge Angle	128.00
6410V02	CRYPTOMETER PLATE, 0.008 Wedge Angle	128.00

24-hour order turnaround!

Thomas ships over 98% of domestic orders for in-stock items the same day we receive them. That's a record we are extremely proud of! On request, we can even assure overnight delivery of a customer's order via national and international carriers.

SHEEN

BK DRYING TIME RECORDERS

Ideal for two component surface coatings

- Clearly shows stages in drying process

These recorders define four stages in drying time via six hemispherical ended needles that run along test strips over a 12 hour time period. Separate needle carriers can be independently released along individual tracks if desired. The instrument holds six 12" x 1" test strips. A graduated time scale is mounted on the side cover.

Drying is shown as a pear-shaped impression corresponding to solvent evaporation time; a continuous track cut, related to sol-gel transition; an interrupted track, showing surface dry time; and a stage where the needle does not penetrate the film - the final drying time. The recorder body is ruggedly built of light alloy and the mechanism is corrosion resistant stainless steel and brass for long service life.

Model 6410V20 (BK3) has six tracks; one variable speed motor moves all six needles at the same time; user may select 6, 12 or 24 hours to travel. Dimensions (L x W x H): 17.5" x 8.7" x 4.3"; weight: 7.7 lbs.

Brass weights (5 grams each) are available to attach to the needles to increase the pressure when testing alkyls, varnishes and paints.

NOTE: see Thomas number 7295C35, 1" cube applicator for applying wet film to glass test strips.

6410V20	BK3 - SIX STRIP DRYING TIME RECORDER, 110 V, 60 Hz	\$2,006.00
6410V30	GLASS STRIPS, Pk. 12	72.00
6410V32	BRASS WEIGHTS, Pk. 6	64.00

SHEEN

WET FILM THICKNESS WHEEL

- Conforms to ASTM D 1212-91, BS 3900, ISO 2808
- Simple device - just roll the gauge over the test material

Eccentric inner ring is calibrated and allows only the film at or below the film thickness to adhere to the disc. Precision ground stainless steel construction for accuracy and long life. Engraved markings will not wear off through use or cleaning in aggressive solvents.



6410V03

THOMAS NO.	ITEM	RANGE (μm)	ACCURACY (μm)	PRICE
6410V00	WET FILM THICKNESS GAUGE	0-100	± 3	\$280.00
6410V03	WET FILM THICKNESS GAUGE	0-200	± 5	308.00
6410V06	WET FILM THICKNESS GAUGE	0-500	± 13	308.00
6410V09	WET FILM THICKNESS GAUGE	0-1000	± 25	308.00

SHEEN

WET FILM COMB GAUGES

Precision ground, stainless steel comb gauges are ideal for wet film thickness measurements of adhesive, enamel, lacquer and paint applied to a smooth surface



6410V62, V64, V66

- Durable, high grade stainless steel
- Easily cleaned with solvent
- Conforms to ASTM D 4414, BS 3900C5 and ISO 2808

Set of three gauges provide a thickness range of 0 to

1200 μm to 48 thousands. Gauges are supplied in credit card-size wallet. Dimensions: 60 x 30 x 2 mm; Weight: 22 grams.

THOMAS NO.	ITEM	RANGE (μm)	RANGE (THOUSANDS)	PRICE
6410V62	WET FILM COMB GAUGE	0-120	0-5	\$62.90
6410V64	WET FILM COMB GAUGE	50-600	0-24	62.90
6410V66	WET FILM COMB GAUGE	100-1200	0-48	62.90

SHEEN

SAGGING/LEVELING TESTER

Precisely machined, high grade stainless steel instrument allows for the determination of two tests



6410V60

Sagging Test:

Drawdown application of 10 parallel, increasing film thicknesses on a test panel. Panel is placed vertical with thickest film at bottom. First film not to sag into the one below is Sag index.

Leveling Test: Draw down application of film through five pairs of gaps on a test panel. Film is dried in horizontal position. Good flow and leveling materials have small gap between film pairs.

- Sag Test Film Thickness: 75, 100, 125, 150, 175, 200, 225, 250, 275, 300 μm
- Leveling Test Gap Sizes: 100, 200, 300, 500, 1,000 μm
- Dimensions: 120 x 19 x 19 mm; Weight: 0.2 Kg
- Film width: 80 mm

Other sizes available on special order.

6410V60	SAGGING/LEVELING TESTER	370.00
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PRECISION GAGE & TOOL

NYPC LEVELING TEST BLADE

Used in quality control and laboratory research



6410V65

- Rapid, draw-down test method
- Conforms to ASTM D 2801

Test blade allows for better production analysis through accurate measurements of leveling. Test method correlates well with brushout ratings, eliminates wetting of the substrate as a variable, provides clearly defined

numerical ratings and is reproducible from one operator to another. A rating of "10" is assigned to a condition of such poor leveling that all of the applied stripes remain completely separated and a rating of "10" to a condition of excellent leveling.

The instrument was designed and originated by the Technical Subcommittee #44 of the New York Society for Paint Technology.

NOTE: test blade is not for use with unpigmented products, textured finishes or dark colors.

6410V65	NYPC LEVELING TEST BLADE	\$265.00
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DEFELSKO

COATING THICKNESS GAUGES

PosiPen®



6410W02

- Measures non-magnetic coatings such as paint, enamel, plating and hot-dip galvanizing on steel
- Ideal for measuring on small, hot or hard-to-reach surfaces; has the smallest unique magnet of any coating thickness gauge
- Each has two scales: mils (inch) and microns (metric)
- Triple indicator; use the red/silver joining line when the gauge is horizontal, the green line when the gauge is pointing straight down and the blue line when the gauge is pointing straight up

Range: 0.25 to 20 mils or 5 to 500 microns; tolerance $\pm 10\%$ and 0.1 mil or $\pm 10\%$ and 2.5 microns; calibrated to NIST calibration standards.

Use 6410W02 for measurements on surfaces with normal temperatures. Use 6410W04 for measurements on surfaces with extreme temperatures (between -100° and $+230^\circ\text{C}$).

6410W02	GAUGE, PosiPen, Regular	\$25.00
6410W04	GAUGE, PosiPen, -100° to $+230^\circ\text{C}$	275.00

Thomas Scientific

DEFELSKO

COATING THICKNESS GAUGES

PosiTest®

- For the nondestructive measurement of non-magnetic coatings on steel
- Permanently calibrated
- Highly wear-resistant carbide probe for longest life and continuous accuracy
- Refined magnet and balance arm assemblies provide improved resolution and accuracy; four scale ranges available to fit all applications
- Extra-rugged housing; not affected by mechanical shock, water, acid or solvents; explosion proof and refinery safe
- Compact and lightweight; precisely balanced, independent of gravity—can be used in any position

Unique overall design; fully supported; positive positioning; no pivoting tendencies during measurement. Can be used fully supported or with only front probe area contacting surface.

Easy-to-use features include: positive visual and audible indicators to designate when thickness reading is established; "V" grooves in probe housing and gauge base to allow correct positioning on cylindrical objects; and probe contact and dial rotation all in a one-finger operation.

Remove center of dial cover for easy recalibration adjustment. GO/NO-GO button can be preset for rapid measurement.

With permanent rare-earth cobalt magnet—no battery. Furnished with wrist strap, neck strap and instructions in a high-quality genuine leather case with belt loops.



6410W06



6410W08

DEFELSKO

WET FILM THICKNESS GAUGES



6410W14



6410W24

- Measure wet coatings on flat surfaces; outer rim of disc is completely wetted, inner flats wetted according to thickness of the wet film
- Fast and easy to use
- Meet ASTM D 1212, D 713
- Complete with leather case

6410W20, W24 and W26 are "Hotcake" style and meet ASTM D 4414.

NON MAGNETIC COATING THICKNESS GAUGES

THOMAS NO.	USE	SCALE	TOLERANCE	PRICE
6410W06	Electroplating thin paint films, phosphating on steel	0-8 mils	±0.4 mils up to 0.8 mils ±5% over 0.8 mils	\$330.00
6410W08	Hot dip galvanizing, hard chrome metalizing, paint, enamel, plastic coatings on steel	0-80 mils	±0.2 mils up to 4 mils ±5% over 4 mils	330.00
6410W10	Electroplating thin paint films, phosphating on steel	0-200 microns	±1 micron up to 20 microns ±5% over 20 microns	330.00
6410W12	Hot dip galvanizing, hard chrome metalizing, paint, enamel, plastic coatings on steel	0-2000 microns	±5 microns up to 100 microns ±5% over 100 microns	330.00

6410W14	GAUGE, Wet Film Square, 1/30 mils	845.00
6410W16	GAUGE, Wet Film Square, 4-60 mils	45.00
6410W18	GAUGE, Wet Film Square, 10-500 microns	45.00
6410W20	GAUGE, Wet Film Rotary, Red, 0-100 mils	25.65
6410W24	GAUGE, Wet Film Rotary, Gold, 0-100 mils	25.65
6410W26	GAUGE, Wet Film Rotary, Aluminum, 0-100 mils	25.65

DEFELSKO

POWDER CHECKER™ THICKNESS GAUGES

Measure the thickness of applied dry coating powder before curing



6410W31

will not cause "plowing" or "spillover." Broad stand-offs on both sides of teeth help keep gauge perpendicular to the surface during measuring. Rugged aluminum construction provides long life and static control. Protective leather pouch is included with each gauge.

- Manufactured to a tolerance of ± 0.0002
- Convenient shirt pocket size
- Available in mils or microns

Gauges are ideal for set-up and quality control. Gauges work on a variety of part sizes, shapes and substrates such as metal, plastic, wood, glass and more. Sharp teeth

will not cause "plowing" or "spillover." Broad stand-offs on both sides of teeth help keep gauge perpendicular to the surface during measuring. Rugged aluminum construction provides long life and static control. Protective leather pouch is included with each gauge.

THOMAS NO.	TOOTH 1 HEIGHT	TOOTH 2 HEIGHT	TOOTH 3 HEIGHT	TOOTH 4 HEIGHT	PRICE
6410W31	3 mils	6 mils	9 mils	12 mils	\$39.50
6410W33	10 mils	15 mils	20 mils	25 mils	39.50
6410W35	20 mils	30 mils	40 mils	50 mils	39.50
6410W37	75 μm	150 μm	225 μm	300 μm	39.50
6410W39	250 μm	375 μm	500 μm	625 μm	39.50
6410W41	500 μm	750 μm	1,000 μm	1,250 μm	39.50

THICKNESS GAUGE PRINTER

Wireless PosiPrinter™ Infrared Printer for use with 6410W60 series thickness gauges



6410W43

- Compact and affordable
- Uses standard 2 1/2" thermal paper

Place gauge and printer within 18" of each other and select PRINT on the gauge menu to instantly beam invisible infrared light to the printer. Dimensions: 3.6" x 7.3" x 2.5" (9.14 x 18.54 x 6.35 cm). Powered by four "AA" batteries.

6410W43	WIRELESS PRINTER	\$175.00
6410W45	THERMAL PAPER, 2 1/2" PK. 6	15.00

DEFELSKO

COATING THICKNESS STANDARDS

NIST Calibration Standards for Coating Thickness Gauges



6410W46

For use with ferrous gauges; mil thickness approximately 0, 0.25, 0.70, 2.00.

6410W46	STANDARD, 0-2 mils, 0-40 microns	9637.00
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- Each set of standards consists of four mild steel test plates mounted on a 4" x 6" hard board
- Three test plates are precision chrome coated and identified in both metric and inch; fourth test plate is a zero plate
- Each set supplied in a moisture-repellent carrying case



CALLING CARD WET FILM THICKNESS GAUGE



6410W55

- Easy to use
- Press gauge into wet coating. Coating thickness shows between deepest tooth with paint on it and next higher tooth without paint. Measures in mils and microns. Size: 2 1/2" x 3 1/2" x 0.034 mils.

6410W55	WET FILM THICKNESS GAUGE	\$1.95
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DEFELSKO

COATING THICKNESS STANDARDS

Used to verify the accuracy and calibration of magnetic or eddy current-type coating thickness gauges



6410W50

- Resolution: 0.0004 mils (0.01 microns)
- Accuracy: $\pm 1.5\%$
- NIST Traceable

Standards include a zero (uncoated) plate and two other coated plates of certified coating thickness mounted in a durable leatherette case plus a certificate of accuracy.

SPECIFICATIONS:

Plate Size:	35 x 35 x 2 mm
Base Material:	Steel (ferrous - for magnetic gauges) Aluminum (non-ferrous - for eddy-current gauges)
Thickness Material:	Epoxy (under 500 μm)
Slip Gauge Traceability:	NIST Certificate No. 98146-A, 95691-A
Substrate Type:	Mild Steel or 5005 Aluminum Alloy
Substrate Surface Finish:	Less than 0.3 μm Ra

THOMAS NO.	SUBSTRATE	APPROXIMATE THICKNESSES	PRICE
6410W50	Ferrous Metal (Steel)	2.00 mils (50 μm) 20.00 mils (500 μm)	\$262.50
6410W52	Non-Ferrous Metal (Aluminum)	2.00 mils (50 μm) 20.00 mils (500 μm)	262.50

DEFELSKO

POSITECTOR® 6000 ELECTRONIC THICKNESS GAUGES

- Adjustable to any known thickness
- Low range accuracy and resolution (hundredths)
- Instant auto-calibration
- Simple one-handed operation
- Unique integral probe design

RESET feature instantly restores factory settings. Converts instantly between Mils/microns. Last reading is displayed upon power-up. Provides temperature and physical stability warnings. Display has easy-to-understand LCD symbols. Includes quality leather carrying pouch with belt clip, 9 V alkaline battery (see Thomas numbers 1481 K65 and K75 for replacements) and precision plastic shim standards. All Positector thickness gauges are supplied with NIST certificate of analysis. See Thomas number 6410W43 for optional wireless printer.



6410W60

ELECTRONIC THICKNESS GAUGE

THOMAS NO.	RANGE (mL/m)	INCREMENTS (LOW/HIGH RANGE, mL)	STATISTIC CAPABILITY	MEMORY	PRICE
6410W60	0-800-1500	.05/1	No	No	\$395.00
6410W61*	0-600-500	0.05/2	No	No	\$95.00
6410W62	0-800-1500	.05/1	Yes	No	745.00
6410W63*	0-600-500	0.05/2	Yes	No	\$45.00
6410W64	0-600-1500	.05/1	Yes	Yes	995.00
6410W65*	0-600-600	0.05/2	Yes	Yes	1,095.00
6410W66	0-2500-6	2/5	Yes	No	645.00
6410W68	0-600-1500	0.1	No	No	695.00
6410W69*	0-600-500	0.05/2	No	No	795.00
6410W70	0-600-1500	0.1	Yes	No	945.00
6410W71*	0-600-500	0.05/2	Yes	No	945.00
6410W72	0-600-1500	0.1	Yes	Yes	1,095.00
6410W73*	0-600-500	0.05/2	Yes	Yes	1,195.00
6410W76	0-600-1000	0.05 to 2 0.1 to 60	No	No	1,095.00
6410W77*	0-600-1500	0.05 to 2	No	No	1,195.00
6410W78	0-600-1500	0.05 to 2 0.1 to 60	Yes	No	1,245.00
6410W79*	0-600-1500	0.05 to 2	Yes	Yes	1,245.00
6410W81	0-600-1500	0.05 to 2 0.1 to 60	No	Yes	1,495.00
6410W82*	0-600-1500	0.05 to 2	Yes	Yes	1,505.00

*Supplied with separate probe with 4" cable and plug.

TANTEC

CAM-PLUS MICRO CONTACT ANGLE METER

Rugged, simple-to-use, highly repeatable QC and analytical tool



6410W87

- Uses patented projection screen Half-Angle[®] measuring technique
- Rail loading system allows simple loading of samples
- For objects up to 2" x 2" for standard applications, including wire and small tubings up to 1/8" dia.
- Measuring range: 0-180°
- Repeatability: ±2°
- Accuracy: ±1.5°
- Magnification: x6, x12
- Dosing: 50-75 droplets

Meter can be used for evaluation of solid surfaces for adhesion, determining the hydrophobic and hydrophilic nature of the substrate, surface cleanliness or liquid absorption rates. Half-Angle technique draws a line through the apex of the droplet from the interface point between the liquid/solid surfaces, eliminating potential sources of human error in measurement of finding the tangent line.

Projection technique allows several people to simultaneously discuss the results of the work. The droplet image is magnified and displayed right-side-up for simpler measurements. The fiber optic light source increases the light intensity for easier measuring in brightly lit rooms and crisply defines the image. The micrometer syringe assembly assures measured droplets can be formed repeatedly. Dimensions (W x L x D): 8" x 15" x 13"; weight: 14 lbs.

6410W87	CONTACT ANGLE METER, CAM-PLUS, 620 V	\$5,825.00
6410W89	CONTACT ANGLE METER, CAM-PLUS, 220 V	\$,975.00

SHEEN

PORTABLE MINI GLOSSMETER

Handy pocket-sized glossmeter is designed to cost-effectively meet field, lab and shop needs



6410W90

- Conforms to ASTM D 523, ISO 2813, BS 3900 and DIN 67530
- Easy, one button operation
- Large, backlit LCD is visible in low light
- Digital push button calibration - no thumb wheels or knobs to adjust
- Low battery warning indicator and automatic power down battery saver
- 60° measurement geometry
- Illuminant C light source
- Range: 0.1 to 199.9 gloss units (0.1 gloss unit resolution)
- Accuracy: ±1.0 gloss unit (against reference standard)
- Operating temperature: 0-40° C

Easy to use with little or no training. Features one button operation and digitally adjusted calibration. Yields precise measurements. Optical system and electronics housed in a rugged steel case for long-term, constant use. Includes case, rechargeable battery pack, 110 V/60 Hz adapter/recharger unit and calibration standard. Dimensions (L x D x H): 120 x 65 x 100 mm; weight: 800 g.

6410W90	MINI GLOSS 10TH METER	\$1,430.00
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SHEEN

MICROGLOSS[®]

Compact 60° Small Orifice Glossmeter with a pinpoint 2 x 2 mm orifice, allows accurate gloss measurements at 60° with intricate details on small samples



6410W93

- Meets ASTM D 523
- Especially useful in packaging, metal finishing, automotive and plastics labs
- Measurement within a second; LED display of latest reading, number of readings
- Statistics capabilities: Max., Min., Average and Standard Deviation
- Two second auto calibration; calibration reference tile included

The instrument includes gloss standard, RS 232 interface and a lightweight carrying case. Rechargeable battery pack or AC powered; lithium battery enables calibration data and approximately 4,000 readings to be stored for about 10 years.

Dimensions (L x D x H): 195 x 65 x 130 mm; weight 2.2 lbs.

6410W93	MICROGLOSS 15559	\$3,120.00
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Check our Index under
Paint Testing Apparatus

for a large selection of products for the Paint and Coatings laboratory.



SHEEN

REFLECTOMETER

Measures the luminous reflectance of surfaces, including metallized films



6410W96

- Conforms to ISO 6504, DIN 55984, ASTM E 97
- Measuring area: 9 x 13 mm; accuracy ± 1 unit
- 45°/0° geometry illuminant C light source
- Digital calibration, large, backlit LCD

Instrument uses standard colorimetric optical geometry to measure opacity (hiding power) and whiteness. Useful for performing simple shade sorting tasks. Includes calibration standards, rechargeable battery pack, battery charger and carrying case. Scale is 0-100, where 100 equals a completely white surface and 0 equals a completely black surface.

6410W96 REFLECTOMETER, 110 V \$1,698.00



Thomas Tips

Gloss Meter Recommendations

Selecting the right gloss meter and the correct angle of measurement depends upon the gloss finish. The 60° measuring angle is the most common and is used for shiny coatings and plates. The 20° angle is used for extremely high gloss surfaces such as mirror coatings. The 85° angle is used for matte finishes. Specific applications include paper and vinyl measured at 75° and low-gloss ceramics and films are measured at 45°.

BYK GARDNER

MICRO AND MIRROR GLOSS METERS

Small, portable, battery-powered gloss meters produce fast, easy, accurate measurements in the field or laboratory

- Three geometries in one unit (6410X35, X47) and for high, medium and low gloss surfaces or single geometry units for specific applications (Thomas numbers 6410X05 to X29)
- Automatic calibration and RS 232C interface built into each unit
- Included software program (6410X45) with statistical functions and memory can be used to evaluate data both graphically and numerically
- In compliance with ASTM D 523, DIN 67530 and ISO 2813



6410X35

Micro-gloss meters calibrate automatically in seconds at the touch of a button. A holder, included with the meter and developed specifically for calibration, houses the calibration standard and protects it against scratches and breaking. After calibration, take the instrument out of the holder and select Sample Mode or Statistic Mode, for single or averaged readings. Just press one button to make a measurement.

Model 6410X05, 20° Micro Gloss Meter: geometry for high-gloss paints and coatings, plastics and films, printing (port 9 x 9 mm).

Model 6410X11, 45° Micro Gloss Meter: geometry for ceramics, enamel, plastics and films (port 9 x 13 mm).

Model 6410X17, 60° Micro Gloss Meter: geometry for semi-gloss paints and coatings, plastics and films, cleaning and polishing (port 9 x 18 mm).

Model 6410X23, 75° Micro Gloss Meter: geometry for paper, vinyl siding, cellulose and packaging (port 7 x 42 mm).

Model 6410X29, 85° Micro Gloss Meter: geometry for matte paints and coatings, plastics, rubber (port 7 x 42 mm).

Micro- and Mirror-TRI-Gloss Meters (Thomas numbers 6410X35 and X47) 20°, 60° and 85° in a single unit; universal for all degrees of gloss for paints and coatings, plastics, furniture and automobile parts of all kinds. Micro-TRI-Gloss Meters feature a dual-angle display. Mirror-TRI-Gloss Meters are designed for samples of high reflectance, such as metal surfaces and have an extended range of 0 to 2,000. Micro- and Mirror-TRI-Gloss Meters come complete with holder, software and communication cable. Single Micro Gloss Meters come complete with holder which includes calibration standard. All meters include two standard 9 V batteries. Overall dimensions: 141 x 43 x 72 mm high; weight: 1.1 lbs.

6410X05	MICRO GLOSS METER, 20°	\$2,249.00
6410X00	20° SECONDARY STANDARD	495.00
6410X11	MICRO GLOSS METER, 45°	2,825.00
6410X14	45° SECONDARY STANDARD	480.00
6410X17	MICRO GLOSS METER, 60°	2,249.00
6410X20	60° SECONDARY STANDARD	495.00
6410X23	MICRO GLOSS METER, 75°, Scale 0-180 GL, Metro TAPI T480	2,795.00
6410X26	75° SECONDARY STANDARD	480.00
6410X29	MICRO GLOSS METER, 85°	2,795.00
6410X32	85° SECONDARY STANDARD	545.00
6410X35	MICRO-TRI-GLOSS METER, 20°/60°/85°	3,750.00
6410X38	MICRO-TRI-GLOSS SECONDARY STANDARD	525.00
6410X41	MICRO GLOSS COMMUNICATION CABLE	190.00
6410X45	EASY LINK SOFTWARE	160.00
6410X47	MIRROR-TRI-GLOSS 20°/60°/85°	4,475.00
6410X50	MIRROR-TRI-GLOSS SECONDARY STANDARD	525.00

SHEEN

BENCH GLOSS METERS

Measure gloss of paints, lacquers, mirrors, ceramics or papers on curved or flat surfaces



6410Y66

- Supplied with calibration standard
- Run on batteries or AC adapter (included)
- Automatic calibration feature takes less than two seconds
- Holds up to 4,000 readings and statistics at a time

Gloss meters are easy to use; provide objective, reliable measurements with LCD of readings, statistics and calibration instructions. General paint and mirror finishes can be measured to 99.9 gloss units at 60° on models 6410Y64 and 6410Y66 and both 20° and 60° on 6410Y68. Calibration standard is mounted in protective aluminum case. Alignment guides for positioning samples are provided. Meters turn off automatically after 20 seconds of inactivity; last reading is held and displayed when the meter is turned on. Includes a RS 232 output. Dimensions (L x D x H): 300 x 260 x 190 mm; weight: 3.3 kg.

Models 6410Y64 and Y68 meet ASTM D 523, BS3900-D5, DIN 67530, ISO 2813, BS 1615 and 6161 part 12 and ASTM 2457.

Model 6410Y66 is a 60°, small orifice gloss meter designed for small components and mirror gloss finishes; complies with ASTM D523 and DIN 67530.

NOTE: a 75° gloss meter for measuring papers that meet Tappi T-480 DM-90 standards is available on special order.

6410Y64	GLOSS METER, 60°	83,264.00
6410Y66	GLOSS METER, 60° Small Orifice	3,264.00
6410Y68	GLOSS METER, 20° and 60°	3,832.00
6410Y70	FOOT SWITCH	72.30

SHEEN

VERIVIDE COLOR ASSESSMENT CABINETS

For optimum color consistency and quality



6410Y80

international standard illuminant D6500 within the tolerances prescribed in BS950: Part 1:1967 and ASTM D 1729: D65, an additional level of "Artificial Daylight" for colors of low reflectance; TLB4, Philips Triphosphor lighting has cool appearance and is good choice for work areas; F, filament lighting required by BS950 as a test for metamerism; and UVB, Ultra Violet Blacklight, to reveal fluorescent dyes and bleaches. Cabinets include a 10,000 hour time elapsed meter and the lamps have a 2,000 hour life span.

Model 6410Y88 diffuser is for use with 6410Y80 and should only be used when highly specular materials are to be assessed. Model 6410Y90 fixed angle table is for use with 6410Y80 and has a 45° angle. Model 6410Y92 tilting table is for use with 6410Y80 and is used in testing for metallic metamerism such as vehicle finishing, surface coating and metallic foil manufacture.

SPECIFICATIONS:

Thomas No.	6410Y80	6410Y82	6410Y84
Model No.	CAC 60	CAC 120	CAC 150
Standard Features:	D65TL84FUV: Tube Illuminants 2 x D65, 500 mm 1 x UVB, 600 mm 2 x TLB4, 800 mm	D65TL84FUV: Tube Illuminants 2 x D65, 1200 mm 1 x UVB, 800 mm 1 x TLB4, 1200 mm 1 x TLB4, 800 mm	D65TL84FUV: Tube Illuminants 2 x D65, 1500 mm 2 x UVB, 600 mm 1 x TLB4, 1500 mm 2 x TLB4, 600 mm
	Round Bulbs 6 x F	Round Bulbs 6 x F	Round Bulbs 2 x F
	Dimensions (W x H x D, cm):	Interior: 680 x 360 x 380 Overall: 710 x 570 x 420	Interior: 1260 x 570 x 590 Overall: 1300 x 780 x 620	Interior: 1530 x 370 x 390 Overall: 1560 x 780 x 620

Other illuminant combinations are available on special order; lamp kits must be selected and ordered with the cabinets from the following: D65,FUVB, D65TL84FUVB, D65TL83FTL84, D65TL84FTL83 and D65TL83FUVB. Models CAC120 and CAC60 also come with D65UVB,FUVB.

Power requirements: 110 V, 50/60 Hz.

6410Y80	COLOR ASSESSMENT CABINET, CAC60	\$2,248.00
6410Y82	COLOR ASSESSMENT CABINET, CAC120	2,994.00
6410Y84	COLOR ASSESSMENT CABINET, CAC150	3,278.00
6410Y88	DIFFUSER, For CAC60	366.00
6410Y90	TABLE, 45° Fixed Angle	341.00
6410Y92	TABLE, Tilting	341.00

- Membrane switching keypad
- Electronic ballast light controls
- Can use 26 mm and 38 mm lamps in combination with each other
- Include lamps

Made for accurate, consistent, visual color assessments of coatings, VeriVide cabinets are available in three sizes. At a touch you can switch between: D65 THORN "Artificial Daylight" conforming to the

GRETAG MACBETH™

SPECTRALIGHT™ III COLOR VIEWING BOOTHS

Designed to provide the most accurate simulation of natural daylight



6410Y94

- SmartLogic technology accelerates throughput with faster color approvals
- User-adjustable color temperature feature

The booth's digital display can be used to program a sequence of different light sources for hands-free viewing. This saves time, maximizes sample throughput and helps prevent operator fatigue. You can preset any combination of six light sources: Daylight (D75), Illuminant A (home lighting), horizon, ultraviolet (two levels) and new dual fluorescent sources (TL84 or U30). Booth can be calibrated using a single button and this feature, when used with a traceable spectroradiometer, enables booth to be self-certified. Automatic energy saving mode extends lamp-life and an easy-to-view elapsed time meter shows when lamps need to be replaced.

NOTE: booths with D65 or D50 Daylight lamps are also available on special order.

6410Y94	SPECTRALIGHT III, D75/TL84, 115 V	\$4,300.00
6410Y96	SPECTRALIGHT III, D75/TL84, 230 V	4,730.00
6410Y98	SPECTRALIGHT III, D50/A00, 115 V	4,300.00
6410Y99	SPECTRALIGHT III, D50/A00, 115 V	4,730.00

Replacement Lamps

6410Z19 is recognized by the CIE and simulates office and retail accent lighting, as well as household lighting.

6410Z22 emits near Ultraviolet (UV) energy only. Used for excitation of optical brighteners, whitening agents or fluorescent pigments or dyes.

6410Z25 provides "typical" fluorescent.

6410Z28 provides "typical" fluorescent as used in continental Europe and parts of Asia.

6410Z31 is used with daylight source to provide exact match to real daylight.

6410Z13	REPLACEMENT LAMP, 750 W, Daylight, Pk. 2	\$95.70
6410Z16	REPLACEMENT LAMP, 500 W, Horizon, Pk. 4	192.00
6410Z19	REPLACEMENT LAMP, 150 W, Illuminant A, Pk. 2	59.00
6410Z22	REPLACEMENT LAMP, UV, Pk. 2	73.60
6410Z25	REPLACEMENT LAMP, Cool White Fluorescent, 4150K, Pk. 2	32.90
6410Z28	REPLACEMENT LAMP, Narrow Band Fluorescent, 4100K, Pk. 2	66.25
6410Z31	REPLACEMENT LAMP, 8 W, Fluorescent Ultraviolet	44.30

Filter Assemblies

Two required for each Spectralight. Sold in packages of two only.

0552A01 Macbeth patented 7500K North Sky Daylight replacement filter pack assembly.

0552A02 Macbeth patented 6500K Average North Sky Daylight replacement filter pack assembly.

0552A01	SPL750 FILTER ASSEMBLY	\$1,167.00
0552A02	SPL650 FILTER ASSEMBLY	1,167.00



Can't find it?

If a manufacturer's name or catalog number is not shown, don't assume that the item you want to purchase cannot be supplied by us. We are constantly adding new products to our stock, and many other products can be readily purchased for you on a special order basis.

Your Thomas Technical Sales Representative or Customer Service Representative will be glad to assist you.

Call: 800 345 2100
Government Accounts call: 800 524 1364

GRETAG MACBETH™

JUDGE® II PORTABLE LIGHT BOOTH

Accurate color evaluations achieved in a portable color-balanced lighting system



6410Z40

- 5 light sources ensure maximum accuracy
- Instant switching between light sources for fast operation and ease of use
- Patented lamp technology provides consistent reliability
- High quality results conform to or exceed ASTM D 1729, ISO 3664, DIN, ANSI and BSI standards

Unit supplied with daylight (7500K), incandescent (2856K), Cool White fluorescent (4150K), narrow band fluorescent (3000K) and U.V. Viewing area: 24" W x 19 1/2" D x 17" H; overall 27" W x 22 1/2" D x 22 1/2" H; weight 35 lbs. Easy to assemble. Lamps are included.

6410Z40 and Z43 Light Booths are for U.S. visual standards.

6410Z46 and Z49 Light Booths are for European and international visual standards.

6410Z40	JUDGE II D15 PORTABLE LIGHT BOOTH, 117 V, 50/60 Hz	\$1,304.00
6410Z43	JUDGE II D15 PORTABLE LIGHT BOOTH, 220-240 V, 50/60 Hz	1,295.00
6410Z46	JUDGE II D65 PORTABLE LIGHT BOOTH, 117 V, 50/60 Hz	1,295.00
6410Z49	JUDGE II D65 PORTABLE LIGHT BOOTH, 220-240 V, 50/60 Hz	1,295.00

Replacement Lamps

6410Z55	REPLACEMENT LAMP 7500K, Seven Phosphor North Sky Daylight, Pk. 4	\$66.25
6410Z58	REPLACEMENT LAMP 6500K, Seven Phosphor Average North Sky Daylight, Pk. 4	66.25
6410Z61	REPLACEMENT LAMP 5000K, Seven Phosphor Noon Sky Daylight, Pk. 4	66.25
6410Z64	REPLACEMENT UV LAMP	81.25
6410Z67	REPLACEMENT LAMP, Illuminant A, 75 Watt, Pk. 4	73.00
6410Z70	REPLACEMENT LAMP 4150K, Cool White Fluorescent, Pk. 4	32.65
6410Z73	REPLACEMENT LAMP 4100K, Ultraviolet-Narrow Band Fluorescent, Pk. 4	97.35
6410Z76	REPLACEMENT LAMP 3000K, Ultraviolet-30 Narrow Band Fluorescent, Pk. 4	140.00
6410Z79	REPLACEMENT LAMP 3100K, Warm White Fluorescent, Pk. 4	66.50
6410Z82	REPLACEMENT LAMP KIT, includes all lamps for Judge II D15	140.00
6410Z85	REPLACEMENT LAMP KIT, includes all lamps for Judge II D65	125.50

COLORVIEW® LIGHT BOOTH

Helps in design process



6410Z95

- Overcomes the color memory problem
- Easy to operate
- Compact and portable

System is a laboratory quality light source for use in paint laboratories, paint stores and design studios. Perfect for critical color matching and identifying metamerism matches. Illuminates a 10" x 10" area, with millions of color matches and zero defects.

Has continuous scan of color temperatures from 2856K (incandescent) to 5000K (daylight). Dimensions: 14" x 14" x 14".

6410Z95	COLORVIEW LIGHT BOOTH	\$750.00
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SHEEN

CROSS HATCH CUTTER

"Cross Hatch" test assesses the adhesion of paint coatings on various substrates, taking into account factors such as coating flexibility, interference layers between coating and substrate, etc.



6411A08

- Meets ASTM D 3359, ISO 2409 and BS 3900:E6
 - With 1, 1.5, 2 or 3 mm spaces between the cutting edges
 - Hardened stainless steel cylinder with six or 11 cutting edges
 - Safer and simpler to use than single blades
- Handle is lightweight and comfortable, designed to provide a firm hold

Cutter is carefully and firmly drawn under pressure over the section of coating to form, by two cross cuts, a square or diamond shaped lattice. Adhesive tape is then applied and pulled from sample. Two segments of the circumference of the blades are in part removed and a hold pin is fitted so the tool can be assembled four ways using a retaining thumb screw. Design enables operator to use a substantial part of the total cutting edges.

THOMAS NO.	SUBSTRATE HARDNESS	COATING THICKNESS (µm)	SPACING (mm)	EDGES	PRICE
6411A05	Hard	0-60	1	6	\$312.00
6411A06	Hard	0-60 (0-50 ASTM)	1	11	312.00
6411A11	Medium	0-60	1.5	6	312.00
6411A14	Hard & Soft	61-120 (50-125 ASTM)	2	6	312.00
6411A17	Hard & Soft	121-250	3	6	312.00

SHEEN

WOLFF WILBORN PENCIL SCRATCH HARDNESS TESTER

Determine scratch resistance of coating materials, lacquers and synthetic resins

- Easy to use
- Conforms to ASTM D 3363-a and ECCA T4
- Pencil exchange is quick and easy

Can be used as a QA device once a pencil hardness standard specification is developed or as a research tool to determine the hardness a coating will withstand. A constant pressure of 765 grams is applied using variable hardness pencils at a fixed angle of 45°. Scratch tester comes complete with 14 pencils in the range of 6B to 6H, a pencil sharpener, abrasive paper and carrying case.



6411A30

6411A30	PENCIL SCRATCH HARDNESS TESTER	\$344.00
6411A35	PENCILS, Set of 14	40.00

SHEEN

SWARD HARDNESS ROCKER

Hardness of organic coatings is based on the amplitude of the oscillation of a rocking device that decreases more rapidly on a softer surface

- Conforms to test procedure ASTM D 2134

Unit is set to obtain 50 oscillations on a standard glass plate representing 100%. Sample is compared to the glass plate standard as a percent of the standard. Number of oscillations is easily adjusted with knurled nuts on a vertical threaded rod. Dimensions: 500 x 340 x 300 mm; Weight: 1.825 kg. Includes draft-proof plastic hood and leveling table.



6411A60

6411A60	HARDNESS ROCKER	\$1,064.00
6411A65	DRAFT SCREEN	80.00
6411A68	GLASS LEVELING PLATE	48.00
6411A71	LEVEL TABLE ASSEMBLY	144.00

SHEEN

MECHANIZED SCRATCH TESTER

Tests and yields consistent results in a coating's scrape adhesion and resistance to mar

- Conforms to ASTM D 5278
- Motor speed: 6 mm/sec
- Includes tip assembly

Tests a coating's resistance to damage when a loaded tip is raked across a relatively smooth flat surface. Provides better repeatability than hand operated testers. Cover encloses the gears and other moving parts. The loop arm is counterpoised and rigid to prevent whip or chatter at the tip. Durable loop can be easily removed for inspection and replacement. Included weights provide 100 gm to 2 kg mass and are loaded above the tip. Standard test panels of 150 x 100 mm with thickness up to 1.65 mm can be used. Unit may be adapted to meet the requirements of ASTM D 2197 and ECCA-T11. Power requirements: 110 V, 60 Hz.



6411A80

6411A80	MECHANIZED SCRATCH TESTER	\$3,615.99
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SHEEN

PENDULUM HARDNESS ROCKER

Hardness of a coating is measured by the amplitude of the pendulum's oscillations that decrease more quickly on soft surfaces

- Conforms to Koenig and Persoz tests, ISO 1522, ASTM D 4366, DIN 53157 and BS 3900 part E
- Photo sensor is accurately positioned to detect pendulum swings
- Instrument is supplied with two pendulums; one for the Koenig test and one for the Persoz test

Pendulum is placed into position via a remote lever ensuring proper alignment and released via a flexible cable trigger outside the case. Instrument is housed in a quick release, transparent plastic case allowing visual and physical access and to prevent the influence of air movement. The instrument base is of heavy cast iron for exceptional stability and fitted with leveling screws and a spirit level. Dimensions: 340 x 370 x 690 mm. Weight: 25 kg.



6411B10

6411B10	PENDULUM HARDNESS ROCKER	\$4,455.99
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SHEEN

CUPPING TESTER

Designed to test the elasticity and adhesive qualities of lacquers, paints and other protective coatings applied to metal substrates



- Conforms to ISO 1520, BS 3900 E4 and DIN/ISO 1520
- Indenter concentric with a corresponding die
- Heavy polished and coated steel construction for exceptional durability

Hardened steel, 20 mm diameter, hemispherical indenter is applied under pressure to the uncoated side of a test panel. While the test is in-process, observations are made as to cracking and detachment of the coating. Test panel specifications: 70 to 90 mm square; 0.3 to 1.25 mm thick. Dimensions: 200 x 300 x 280 mm; weight: 11 kg.

6411B30

6411B30 CUPPING TESTER \$2,440.00

SHEEN

CONICAL MANDREL BEND TESTER

Ideally suited for determining a coating's resistance to cracking and detachment from a substrate



- Conforms to ASTM D 522, BS3900 E11 and ISO 6860
- Heavy construction for ease of use and durability

A coated test panel is bent around a conically shaped metal bar to indicate elasticity and adhesive properties. Graduated clamping bar shows mandrel diameter at failure with test panel thickness. Panel Specifications: up to 0.8 mm thick (metal panel);

6411B40

18 x 10 cm (L x W). Instrument specifications: steel mandrel: 203 mm x 38 tapered to 3 mm; weight: 8.2 lbs. (3.72 kg); dimensions: 290 x 160 x 300 mm.

6411B40 CONICAL MANDREL \$1,072.00

SHEEN

CYLINDRICAL MANDREL BEND TESTER

Determines a coating's resistance to cracking and detachment from a metal substrate when subjected to bending around a cylindrical mandrel



- Conforms to (B09) BS 3900:E1, ISO 1519, DIN 53152 and (6410B50) ASTM D 522-B
- Simple operation
- Heavy construction and stainless steel mandrels for durability

Test panel is clamped into place; coated panel is bent around the selected mandrel via the handle/bending mechanism. Adjustable panel holder and bending mechanism ensure panel is firmly bent around mandrel. Pre-drilled base is easily secured to a workbench. Panel specifications (W x L x D): up to 50 x 100 x 1 mm. Dimensions (L x W x H): 190 x 115 x 250 mm; weight: 8.8 kg.

6411B50

6411B50 CYLINDRICAL MANDREL ASTM \$2,140.00

SHEEN

TUBULAR IMPACT TESTERS

Determine impact resistance, surface damage and penetration of paints, varnishes, coil coatings, plating, plastic coatings, laminations, plastic resins/composites, sheet materials and metals



- Model 6411B80 conforms to ASTM D 2794; Model 6411B85 conforms to BS 6496
- Simple to operate
- Easily modified to suit testing requirements

Test panels are held firmly in place by securing clips to avoid slippage. Retaining collar is easily set to user-selected height. A weight is held in place and released via rotating collar ensuring release height for each test. The weight strikes the indenter tool which rests on the test panel. Weight: 11 kg.

6411B80

THOMAS NO.	FALLING WEIGHT	INDENTER DIA./ TUBE DIA.	TUBE HEIGHT	PRICE
6411B80	4 lbs.	0.625" (15.8 mm) / 0.542" (13.8 mm)	40" (101.7 cm)	\$1,336.00
6411B85	2 lbs.	0.625" (15.8 mm) / 0.642" (16.3 mm)	25" (63.5 cm)	1,304.00

SHEEN

TUBULAR IMPACT TESTER

Allows both the failure point to be measured and a classification of the sample



6411890

- Conforms to ISO 6272, DIN 55669 and BS 3900:E13
- Adjustable impact depth
- Rotating sample clamp
- Can be used with paints, varnishes, plastic coatings, laminations and sheet material

Clamp holds test piece securely in place. Impact depth is adjusted via a graduated ring. A protective sleeve surrounds the impact point.

THOMAS NO.	FALLING WEIGHT	TUBE HEIGHT	PRICE
6411890	2½ lbs.	39" (100 cm)	\$1,872.00

SHEEN

WET ABRASION SCRUB TESTER

Provides accelerated method for determining wear resistance of surface coatings and performance of cleaning compounds

Wet Abrasion Scrub Tester

- Tests coatings' scrub and abrasion resistance and washability
- Provides precisely controlled conditions
- Yields repeatable, measurable results

Using two suspended brushes or sponges with a scrub rate of 37 cycles per minute (± 1), the machine can be set for up to 100,000 strokes. Washing agent is precisely dosed via a peristaltic pump, free from cross-contamination by design. Stroke length is adjustable between 100 and 300 mm in 50 mm steps. Test items up to 1.5 cm thick can be clamped easily in the machine's frame. Applications include testing for gloss retention or deterioration, soil or print removal and effectiveness of waxes or protectants. Material tested can include: paints, varnishes, inks and plastics; floor coverings, carpets and upholstery; glazed and unglazed ceramics; woods, leather, natural surfaces; metal including anodized or plated items. Unit is fan-cooled and includes a glass viewing panel. Includes two Nylon Bristle Brushes, two Rubber Mats and 2 Stimms (12.7 x 0.25 mm).



6411C05

NOTE: Pneumatic version is available on special order - has solvent-resistant components for test procedures requiring hazardous solvent based materials

Four Head Washability Tester (6411C10)

The four head tester adds these features to the wet abrasion tester above:

- Four heads enable four product tests at once
- Weights from 300 to 1,000 gm (in 100 gm increments) can be added to accelerate wear
- Motor speeds include 20, 25, 30, 35 and 37 strokes per minute
- Movable carriage enables test media direct application sponges

Optional automatic stroke counter has four large LCDs which indicate the number of strokes for each track. The tester allows the user to stop one or more counters while the others continue. Carriage lifts off for cleaning. Dimensions: 650 x 400 x 330 mm; weight 29 to 32 kg depending on configuration. For Scrub Media, see 6411C26 series.

THOMAS NO.	MODEL	DESCRIPTION	PRICE
6411C05	903/2	WET ABRASION SCRUB TESTER, to ASTM D 2486-85, Loading 454 g	\$6,384.00
6411C10	903/PG	WASHABILITY TESTER, 4-Head	11,512.00
6411C13	903/PG/021	STROKE COUNTER UNIT	2,776.00
6411C15	903/138/P2	TEST PANELS, Pk. 100	160.00
6411C24	903/153/P	REPLACEMENT BRUSHES, Pk. 2	228.00

LENETA

ASTM SCRUB MEDIA

Aqueous dispersions of detergents, cellulosic thickener and preservative



Media is adjusted and tested to assure batch-to-batch uniformity. Each container is fully identified by batch number and

6411C26

shipping date. Contents of unopened containers are guaranteed standard in performance for one year. Media is supplied in pint (473 mL) jars which should be sufficient for approximately 40 tests.

Non-Abrasive Type, Thomas numbers 6411C26 and C28, are used in ASTM Method D 3450 test for washability properties.

Abrasive Type, Thomas numbers 6411C30 and C32, contains ground silica for accelerated erosion and are used in ASTM D 2486, D 4213 and D 3450 scrub resistance and washability tests.

6411C26	MEDIA, Non-Abrasive, 1 Pint Jar	.....	\$19.50
6411C28	MEDIA, Non-Abrasive, Co. 6-Jars	.....	156.00
6411C30	MEDIA, Abrasive, 1 Pint Jar	.....	19.50
6411C32	MEDIA, Abrasive, Co. 6-Jars	.....	156.00

MITUTOYO

MICROMETERS

Simple to use



- Highly durable
- With carbide faces and positive locking clamp

6411D10

Frame is metal with baked enamel finish. Sleeve and thimble are chrome-plated. Furnished with carrying case.

Model 6411D10 caliper has ratchet stop and covers range zero to one inch in 0.001" increments.

Model 6411D15 caliper has friction thimble and covers range zero to 25 mm in 0.01 mm increments.

6411D10	CALIPER, 1" x 0.001"	.....	\$80.00
6411D15	CALIPER, 25 mm x 0.01	.....	160.00

MITUTOYO

MICROMETERS

Digital, Digimatic



6411D21

- Precise vernier scale on the thimble
- Carbide measuring faces for greater durability
- Range is 0-25 mm (0-1 in.)
- Easy one-handed manipulation

High-contrast, easy-to-read, six digit LCD with a readout capability of 50 millionths of an inch. Frame is lightweight alloy metal with baked enamel finish. Sleeve and thimble are satin-chrome for reduced glare. Includes SR 44 battery (6411J18), key spanner, custom carrying case and manual.

6411D21	MICROMETER, Digital	\$140.00
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IP-54 level water resistance protection



6411E05

- Extra large LCD for easy reading with 6.5 mm high digits
- Battery-saving, automatic power-off after 20 minutes idle time
- One touch Origin setting
- Inch-metric conversion at the touch of a button
- Carbide measuring face ensures years of durability and accuracy

The Series 293 shop-hardened digimatic micrometer has been specially sealed to resist even direct coolant spray from any direction, as well as the dirt and grit generated by machining operations.

Measuring Range: 0-1"/0-25.4 mm;
Resolution: 0.0005"/0.001 mm.
Accuracy: ± 0.0005".

6411E05	MICROMETER, 9-1/16-25 mm	\$169.00
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MITUTOYO

CALIPERS

VERNIER Caliper, 160 mm/6 inch



6411G15

- Stainless steel, with self-locking slide
- Combination of inside caliper, outside caliper and depth gauge
- Graduated to 160 mm in 1 mm divisions and to 6 inches in 1/16 inch divisions
- Verniers permit reading to 0.05 mm and 1/32 inch, respectively

Maximum jaw opening 135 mm (5 1/4"), jaw depth 43 mm (1 1/4"). Spring-loaded slide release locks automatically upon removal of thumb pressure. Supplied with case.

6411G15	VERNIER CALIPER	\$70.00
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BEL-ART

CALIPERS

Vernier Caliper, 190 mm/7.6 inch



6411H10

- Of strong polymeric plastic
- Suitable for student use and other non-critical applications
- Combination inside-outside caliper with depth stem
- Graduated to 130 mm in 1 mm increments and to 5 1/8" in 0.05" increments
- Vernier permits reading to 0.05 mm and 0.001 inch, respectively
- Maximum jaw opening is 132 mm (5.2"); jaw depth 40 mm

6411H10	VERNIER CALIPER	\$39.99
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MITUTOYO

CALIPERS

PLASTIC-CAL: a multi-purpose, Digimatic caliper



6411H15

- Super value
- Durable and lightweight
- Plastic jaws will not mar easily-damaged surfaces
- Accurate, digital, easy-to-read display
- Range: 150 mm/6"
- Resolution: 0.1 mm/0.001"
- Instrumental error: ± 0.2 mm/ ± 0.008 "

Ideal for use in lab, classroom, botany nursery, etc. Gives accurate readings on LCD. Available in four bright colors: blue, green, yellow and pink (ideal for color coding your departments). Battery life 10,000 hours.

6411H15	CALIPER, 0-150 mm, Blue	40.00
6411H20	CALIPER, 0-150 mm, Green	40.00
6411H25	CALIPER, 0-150 mm, Yellow	40.00
6411H30	CALIPER, 0-150 mm, Pink	40.00

MYCAL Lite Digimatic® Caliper



6411H35

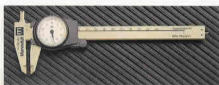
- Economical precision
- Large, four digit LCD
- Depth bar
- Range: 0-6"/0-150 mm
- LCD Resolution: 0.001"/0.1 mm
- Accuracy: ± 0.005 " (± 0.2 mm)

Zero point can be set anywhere for quick comparison measurements. Alarm alerts user of low battery or over-speed. Includes one silver oxide battery (SR-44) which should last two years under normal use.

6411H35	CALIPER, MyCal Lite	301.50
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BEL-ART

DIAL CALIPERS



6411H45

- Of strong polymeric plastic
- Suitable for student use and other non-critical applications
- Combination inside-outside caliper with depth stem
- Graduated to 130 mm in 1 mm increments and to 5 1/4 inches in 0.05" increments
- Dial is graduated in 0.1 mm increments; readings are estimable
- Dial is adjustable for zero settings and for differential measurements

Maximum jaw opening is 130 mm (5.2 inches); jaw depth is 40 mm.

6411H45	VERNER CALIPER	60.00
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MITUTOYO

DIAL CALIPERS



6411H70

- Of hardened stainless steel, with large dial face
- Combination inside-outside depth and step measurements
- Graduated to 150 mm in 1 mm increments
- Dial is graduated in .05 mm, with 5 mm per revolution
- Adjustable for zero settings
- Jaw depth 40 mm

Complete with zero adjuster and custom carrying case.

NOTE: available with NIST Traceable Certificate. Ask for details.

6411H70	DIAL CALIPER	388.50
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MITUTOYO

MYCAL DIGIMATIC CALIPER

Series 500 Caliper



6411J17

- Provides digital readout to .0005/0.01mm for error-free reading
- Power-saving design—powered by a single button-type battery
- Can measure steps
- Range: 0-6”/0-150 mm
- LCD Resolution: 0.0005/0.01 mm
- Accuracy: ±.001 mm
- Remarks: With Thumb Roller

Functions include: zero-setting, data hold, error alarm, low battery alarm and data output. Large LCD is easy to read in any lighting. Thumb lock freezes the slider in position when released. Rugged design for everyday use.

Silver oxide (SR-44) battery is used in models 6411D21, 6411E05, 6411H15 to H30, 6411H35, 6411J17 and 6411J45 to J55.

NOTE: available with NIST Traceable Certificate. Ask for details.

6411J17	CALIPER, DIGITAL, MYCAL	\$129.00
6411J18	BATTERY SR-44, Each	4.85
6411J19	BATTERY SR-44, Pk. 10	48.50

MITUTOYO

MYCAL ABSOLUTE DIGIMATIC CALIPERS

Digital readings in either inches or millimeters



6411J45

- Accurate and easy to read

Slider movement errors are eliminated and the absolute positions held for the life of the battery — over 3½ years. Establish the datum point only when installing a new battery. The absolute scale displays the slider position when power is on. Zero setting is required only for master comparison measurements. Measurement data can be output for SPC with an optional SPC cable with data switch (Thomas number 0640A05) and a data hold unit (0640A04). Should the scale surface be soiled by workshop contaminants, an error message is displayed to remind the user to clean instruments and work pieces before measuring. Outside jaw: 40 mm deep; inside jaw: 16.5 mm deep.

SPECIFICATIONS

Thomas No.:	6411J45	6411J50	6411J55
Range:	0-4”/0-100 mm	0-6”/0-150 mm	0-8”/0-200 mm
Resolution:	.0005/0.01 mm		
Instrumental Error:	±.001”±0.02 mm		
Repeatability:	.0005/0.01 mm		
Functions:	Origin Setting, Zero Setting, Data Output, Data Hold (optional), Inch/mm Conversion		
Display:	9-digit LCD with [-] sign (character height: 7.5 mm)		
Battery:	SR44 1.5 V (Watch Battery) x 1pc.		
Ambient Temperature:	0°C to 40°C for operation, -10°C to 60°C for storage		

6411J45	CALIPER, Digital, 0-4”/0-100 mm	\$166.00
6411J50	CALIPER, Digital, 0-6”/0-150 mm	178.00
6411J55	CALIPER, Digital, 0-8”/0-200 mm	232.25

Since 1900



Thomas Scientific (Arthur H. Thomas Co.) has been the one source for quality products and dependable service to the worldwide scientific community.

CHROME-PLATED TAPE MEASURE



- With English and metric scales on blade 13 mm wide
- English scale, 118 inches, in 1/16 inch divisions. Metric scale 300 cm, in 1 mm divisions

With metal hook at end of blade. In chrome-plated case 21 mm high x 48 mm wide x 16 mm thick.

6411T11

6411T11	TAPE MEASURE, 118 in., 300 cm	\$25.00
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DIGITAL FORCE GAUGES

Push/pull measurements in Kg, lbs., oz. and Newton units

- Five digit LCD
- Load cell measurement transducer
- Peak hold and push-button zero
- Zero adjust

Features include selectable fast/slow response, overrange, low battery and advanced function indication. Display reverses to match viewing angle. Optional test stand permits precise tension/compression analysis. Includes hook adapter for tension; flat, cone and chisel head adapters for compression, 5" extension, six AA batteries and carrying case.



SPECIFICATIONS	6411T20	6411T22
Range:	176 oz., 5,000 g, 48 Newtons	44 lb., 20 kg, 196 Newtons
Accuracy (@23°C):	±(0.4 + 1 digit)	±(0.5 + 2 digit)
Resolution:	0.05 oz., 1 g, 0.01 Newtons	0.01 lb., 0.01 kg, 0.05 Newtons
Overload Capacity:	10 kg	30 kg
Update Rate:	Fast Mode: 0.2 seconds; Slow Mode: 0.6 seconds	
Full Scale Deflection:	200 mm	
Power Requirements:	Six 1.5 V AA (UM-3) batteries or DC 9 V adapter* (not included)	
Dimensions:	8.9 x 3.3 x 1.5 inches (227 x 85 x 39 mm)	
Weight:	1.2 lb. (551 g)	

6411T20	DIGITAL FORCE GAUGE	\$383.84
6411T22	DIGITAL FORCE GAUGE, High Capacity	\$48.75
6411T24	TEST STAND	\$98.75
6411T26	AC ADAPTER, 120 V	18.75
6411T28	AC ADAPTER, 230 V	18.75

Product Alert!

Manufacturers may modify existing products or introduce new products. Call your Customer Service Representative for the latest models, pricing and specifications.



MELTING POINT CAPILLARIES

Extra long, borosilicate

- For use with thermometers calibrated for 76 mm immersion
- Of borosilicate glass, thin wall, with one end sealed
- Length is 110 mm
- Inside diameter 0.9 to 1.1 mm and wall thickness approximately 0.25 mm; comply with requirements given in the United States Pharmacopoeia



6418F10

6418F10 CAPILLARIES, M.P., 110 mm, Vial 100 \$10.00

KIMBLE

MELTING POINT CAPILLARIES

Kimax®-51 brand, borosilicate glass

- Suitable for use in determination of blood coagulation time
- Thin wall, with open ends
- Length is 100 mm



6419K07

Size A, 0.8 to 1.1 mm

l.d. x 1.4 to 1.6 mm

o.d.; complies with requirements given in the United States Pharmacopoeia. Size B is 1.2 to 1.4 mm i.d. x 1.5 to 1.8 mm o.d.; of N-51 A glass. Packaged in vials of 100.

6419K07	CAPILLARIES, Size A, Cs. 20 Vls.	\$15.60
6419K23	CAPILLARIES, Size B, Cs. 20 Vls.	15.60

Kimax®-51 brand, with sealed end

- Similar to 6419K07 and K23, but one end is sealed
- Of N-51A borosilicate glass
- Length is 90 mm; packaged in vials of 100

6419L07	CAPILLARIES, Size A, Cs. 20 Vls.	\$134.80
6419L23	CAPILLARIES, Size B, Cs. 20 Vls.	133.40



Melting Point Selection Chart

Thomas Scientific carries a variety of melting point testing equipment to meet the needs of your lab. The Thomas[®] Hoover units have been in widespread use since the 1960's with a history of excellent performance. They meet USP and ASTM standards. The Electrothermal units offer microprocessor control, various temperature options and digital display. The Jencons unit offers programmable heating rates, melt temperature storage and automatic cooling at an economical price. The Mettler Toledo unit is fully automatic and simple to operate. Barnstead/ThermoLyne offers their Mel-Temp[™] series from basic low cost units to programmable units with ramping. Koehler automatic units offer the latest technology for microprocessor-based determinations of melting point ranges of crystalline, powdered and polymeric materials and is used to assess complete purity. Features on-screen viewing by a CCD camera. The chart below compares the complete range and allows selection of the features and performance you require.

NOTE: For more complete descriptions, refer to the catalog listings following this chart, where the products are listed in numerical order.

MELTING POINT: SELECTION CHART

Melting Point Apparatus

THOMAS NO.	MPR / MODEL	TEMP RANGE	GLASS/DIGITAL THERMOMETER	RESOLUTION	SAMPLE TUBES	BATH/CHAMBER	TEMP RAMPING (°C/min.)	AUTO END POINT	MEMORY	RS-232	CALIBRATABLE	NOTES	PRICE
6427F10	Thomas Uni-Melt	350°C	Glass	0.2(1) ⁽¹⁾	Capillary	Silicone Oil	Optical ⁽²⁾ 0.5 to 5°C	No	No	No	Yes ⁽⁷⁾	1,2,7	\$2,457.00
6427H10	Thomas Uni-Melt	350°C	Glass	0.2(1) ⁽¹⁾	Capillary	Silicone Oil	Optical ⁽²⁾ 0.5 to 5°C	No	No	No	Yes ⁽⁷⁾	1,2,7	3,134.00
6427K10	Thomas Uni-Melt	350°C	Glass	0.2(1) ⁽¹⁾	Capillary	Silicone Oil	Optical ⁽²⁾ 0.5 to 3°C	No	No	No	Yes ⁽⁷⁾	1,2	3,488.00
6428D00	Electrothermal IAS100	45 to 400°C	Digital	0.1°C	Capillary	Block	Keypad ⁽³⁾ 1° to 10° C	No	Yes	No	Yes	3	2,313.00
6428D05	Electrothermal IAS200	45 to 400°C	Digital	0.1°C	Capillary	Block	Keypad ⁽³⁾ 0.2 to 10° C	No	Yes	Yes	Yes	3,6	3,355.00
6428D10	Electrothermal IAS300	45 to 400°C	Digital	0.1°C	Capillary	Block	Keypad ⁽³⁾ 0.2 to 10° C	No	Yes	Yes	Yes	3,6	3,587.00
6428D15	Electrothermal IAS400	-10 to 100°C	Digital	0.1°C	Slide	Chamber	Keypad ⁽³⁾ 0.2 to 10° C	No	Yes	Yes	Yes	3	4,049.00
0393A00	Electrothermal IAS001	Ambient to 400°C	Digital	0.1°C	Capillary	Oven	Keypad ⁽³⁾ 0.2 to 10° C	Yes	Yes	Yes	Yes	3	10,965.00
6428T50	Jencons J39W15	360°C	Digital	0.1°C	Capillary	Block	Keypad ⁽³⁾ 0.5 to 10° C	No	Yes	No	No	4	1,670.00
6428T60	Mettler Toledo FP-62	300°C	Digital	0.1°C	Capillary	Block	Keypad ⁽³⁾ 0.1 to 10° C	Yes	No	Yes	Yes	4	5,540.00
6428U01	Barnstead/ThermoLyne 1001	50°C	Glass	1°C	Capillary	Block	Dial	No	No	No	No	7	690.00
6428U03	Barnstead/ThermoLyne 1201D	500°C	Glass	1°C	Capillary	Block	Dial	No	No	No	No	7	781.00
6428U09	Barnstead/ThermoLyne 1101B	500°C	Digital	0.1°C	Capillary	Block	Dial	No	No	No	Yes	—	1,178.00
6428U15	Barnstead/ThermoLyne 1401	400°C	Digital	0.1°C	Capillary	Block	Keypad ⁽³⁾ 0.1 to 10° C	No	Yes	No	Yes	4	2,638.00
6428U20	Koehler K30100	315°C	Digital	0.1°C	Slide	Slide Chamber	Keypad ⁽³⁾ 0.2 to 10° C	Yes	Yes	Yes	Yes	5	6,962.00

Notes:

- Standard full range thermometer resolution is 1°C; optional thermometers are 0.2°C
- Linear Temperature increase requires use of optional **Melting Point Programmer** (6427R15); dial selectable from 0.5°C to 5°C/min
- Adjustable 8x viewing magnifier
- Auto cooling
- CCD camera and 10X display monitor
- Optional CCD camera
- Calibratable via certified glass thermometer



HOOVER MELTING POINT APPARATUS

Thomas-Hoover, Uni-Melt®

All Uni-Melt units feature:

- Designed for fast, reproducible determinations of melting points using glass capillary tubes
- Takes up to five samples simultaneously; meets USP and ASTM specifications
- Electric heater and stirrer automatically disconnect when bath removed from housing
- Bath temperature can be brought near anticipated melting point quickly, then raised slowly until melting occurs at reduced heating rate
- Reaches 350°C bath temperature in 6 1/2 minutes; cools from 300° to 150°C in about 11 minutes; five minutes if compressed air line attached to air inlet tube at rear of housing
- Capillaries illuminated by adjustable, internal lamp and magnified by 38 mm lens



6427F10

500 watt coiled Nichrome heater, adjustable speed stirrer and armored thermometer included in bath assembly and collected in threaded metal head, which mounts on 100 mL beaker. Controls consist of an auto transformer for regulation of heater input, with dial graduated from 0 to 10 in fifty divisions; stirrer rheostat; switch for capillary vibrator and power switch for lamps and stirrer.

Uni-Melt® Melting Point Unit

- Electrically heated, transformer-controlled; range from room temperature to 350°C
- Armored thermometer, 400 mm long; range -10° to +360°C in 1° divisions, numbered at each 10°; enclosed in glass sheath
- Shorter range thermometers offered separately; see 6428K50 series

Overall dimensions 152 mm wide x 178 mm deep x 267 mm high; overall height to top of thermometer armor approximately 648 mm. With thermometer, set of six melting point standards, 16 oz (475 mL) silicone bath fluid, 100 capillaries (6418F10), 3-wire cord and plug and directions for use. For 120 volts, 60 Hz (Hertz). Without thermometer reader or illuminator.

6427F10 MELTING POINT UNIT \$2,457.00

Uni-Melt® with Thermometer Reader

- Identical to 6427F10, but with periscopic thermometer reader

6428C10 Periscopic Thermometer Reader assists in observation of bath temperature and melting capillary. Provides 2 x magnification of thermometer scale segment in window approximately 38 mm above center of capillary observation port. Field covers twelve to fifteen degrees of scale when using thermometer with complete apparatus; covers approximately four degrees of the shorter range thermometers.

To track mercury level, upper mirror of periscope raised or lowered by turning knob on reader housing. Periscopic thermometer reader also sold as separate accessory; see Thomas number 6428C10.



6427H10

6427H10 MELTING POINT UNIT, w/Reader \$3,134.00

Uni-Melt® with Reader and Illuminator

- Identical to 6427F10, but includes thermometer reader and illuminator
- Electrically heated, transformer-controlled; range from room temperature to 350°C
- Armored thermometer, 400 mm long; range -10° to +360°C in 1° divisions, numbered at each 10°; enclosed in glass sheath

6428C55 Thermometer Illuminator is an accessory lamp that lights thermometer scale through rear slot in thermometer guard; can be used with or without thermometer reader. For 120 volts, 60 Hz; 565 watts. Can also be used on 120 volts, 50 Hz. Overall dimensions 152 mm wide x 178 mm deep x 267 mm high.



6427K10

6427K10 MELTING POINT UNIT, Reader and Lamp \$3,496.00



HOOVER MELTING POINT ACCESSORIES

Melting Rate Programmer



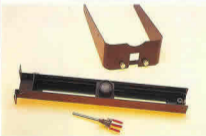
- Automatically maintains selectable rate of temperature rise in bath of Thomas[®]-Hoover Melting Point Apparatus, particularly in expected melting point range of individual samples
- Ensures compliance with USP specifications for testing pharmaceutical products
- Increases accuracy of all melting point determinations by eliminating subjective operator error in establishing and maintaining constant melting rate
- Frees analyst for other duties by making it unnecessary to remain at instrument during bath warm-up
- Range, ambient to 360°C

Heating rate options are switch selectable in ten, $\frac{1}{2}$ degree/minute steps from $\frac{1}{2}$ to 5 Celsius degrees per minute. Programmer incorporates a platinum resistance thermometer bridge circuit, solid state proportioning control and motor-driven, selective switching unit for rate-of-rise control. Second panel lamp glows steadily when power is being applied to bath heater; stops glowing when high limit of control program is reached. Third lamp comes on when limit is reached. Controller is rated at 120 volts $\pm 10\%$, 60 Hz, with maximum non-inductive control capacity of 1,200 watts, controller itself is rated at 10 watts.

6427R15

6427R15 MELTING RATE PROGRAMMER \$2,295.00

Periscopic Thermometer Reader



6428C10

- Supplied with 6427H10 and 6427K10
- U-shaped mounting bracket and screws for permanent installation
- Adjustable, spring-grip clamp for fastening top of reader housing to thermometer armor

6428C10 THERMOMETER READER \$1,136.00

Thermometer Lamp Accessory



6428C55

- Supplied with 6427K10
- 8 watt fluorescent lamp (6281K35) in ventilated metal housing supplants stirrer hood
- With 2-wire cord and plug for 120 volts
- Separate grounding conductor not necessary because illuminator grounded by third conductor of Uni-Melt[™] when mounted on housing

NOTE: on early Uni-Melt Melting Point Units, serial numbers H-1 to H-100, 8S101 to 8S200 and 9S1 to 9S100, installation must be done in our shop at small modification charge; complete bath unit must be returned.

6428C55 THERMOMETER LAMP \$315.00

ELECTROTHERMAL

DIGITAL MELTING POINT APPARATUS

Fast, reliable determinations are achieved with superior digital microprocessor control and accuracy



6428D00



6428D00

All units feature:

- Instruments ramp to start temperature with excellent linearity and control
- Large LCD helps eliminate subjective interpretations
- Adjustable 8X viewing magnifier arm folds away

1. Model IA9100 (6428D00) - Up/Down keys set ramp start (10°C/min search) and melt start. Ramp Start key initiates 1°C/min increase. Four temperature memory capability.

2. Model IA9200 (6428D05) - Includes above features in addition to: selectable ramping - choose any rate increase from 0.2° to 10°C/min or choose from five standard ramps. Features include a built-in RS 232 interface for documentation, clock for time and date stamping, and it can store 500 sets of results.

3. Model IA9300 (6428D10) - In addition to the above features, this model allows you to set two melt temperatures (Start and Complete) for each tube. A select key toggles between the sample tubes and LED indicators on a head up display behind the viewing lens show which tube is being selected.

4. Model IA9400 (6428D15) - Designed for the testing of waxes, fats, greases, oils and other substances that change from a solid to a liquid close to ambient temperature. Melting tests can be carried out as low as 0°C. Other features similar to above models.



6428D15 with E23 printer

6428D00	DIGITAL MELTING POINT APPARATUS, IA9100	\$2,313.00
6428D05	DIGITAL MELTING POINT APPARATUS, IA9200	3,350.00
6428D10	DIGITAL MELTING POINT APPARATUS, IA9300	3,587.00
6428D15	DIGITAL MELTING POINT APPARATUS, IA9400	4,049.00
6428D20	PRINTER	652.00
6428D25	CALIBRATION KIT	226.00



HOOVER MELTING POINT SUPPLIES

Melting Point Standards



6428F12

- Set of six compounds of specified melting ranges in accordance with the U.S. Pharmacopoeia
- As supplied with 6427F10
- In glass vials, with numbered plastic screw caps
- In hinged case of transparent polystyrene, with two empty vials
- Approximate melting ranges of compounds:
 - Vanillin, 81°-83°C
 - Acetanilid, 114°-116°C
 - Acetophenidin, 134°-136°C
 - Sulfanilamide, 164.5°-166.5°C
 - Sulfapyridine, 190°-193°C
 - Caffeine, 235°-237.5°C
- Actual melting point range shown on compound's label

6428F12	MELTING POINT STANDARDS SET	\$118.25
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Bath Vessel (Beaker)

- Borosilicate glass; 100 mL capacity
- Specially designed to fit stirrer-heater assembly in Thomas-Hoover unit



6428H10

6428H10	BATH VESSEL	\$18.50
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(continued on next page)



HOOVER MELTING POINT SUPPLIES (continued)

Heater Coil



6428H40

- Coiled nichrome wire
- Rated at 400 watts on 115 volts

6428H40 HEATER COIL \$18.45

Vibrator Magnet



6428H65

- Replacement armature for capillary vibrator
- Alnico; 35 mm long x 6 mm dia.

6428H65 VIBRATOR MAGNET, 1 1/4 x 1/2 in. \$18.90

6428H67 VIBRATOR MAGNET, 1/2 in. \$46.90

Lamp Bulb

- Rated at 6-7 volts, 0.41 amperes
- With miniature bayonet base
- Replacement for melting point units

6428H84 LAMP BULB, Pk. 10 \$21.50

Thermometer, Standard Range



6428K10

- Graduated stem, with white background
- Range, -10° to +360°C in 1° divisions, numbered at each 10° interval
- Calibrated for 76 mm immersion

Length is approximately 400 mm; diameter, 6 to 7 mm. Thermometers graduated in degrees Kelvin available on special order

6428K10 THERMOMETER, -10 to +360°C... \$29.65

Thermometers, Short Range

- Same as 6428K10, but short range
- Graduation interval, 1/5°C, numbered at each 2°
- Can be used alternately with 6428K10

6428K30 THERMOMETER, 0 to +110°C \$74.40

6428K35 THERMOMETER, +100 to +210°C 79.80

6428K60 THERMOMETER, +200 to +310°C 102.70

6428K65 THERMOMETER, +250 to +360°C 105.00

Silicone Bath Fluid



6428R15

- Superior heat transfer medium in melting point baths, etc.
- High thermal and chemical stability

This clear, colorless, oily liquid has a nominal viscosity of 50 centistokes at 25°C, with a viscosity/temperature coefficient of 0.59. The boiling point is over 360°C with a

flash point above 535°F. The specific gravity is 0.963; the refractive index, 1.402. Surface tension is 20.8 dynes/cm, all at 25°C. Fluid has a maximum volatility, with 0.5% weight loss over 24 hours at 150°C.

6428R15 SILICONE FLUID, 16 oz., Ea \$31.40

6428R17 SILICONE FLUID, 16 oz., Pk. 5 180.40

6428R20 SILICONE FLUID, 32 oz., Ea 62.50

6428R25 SILICONE FLUID, 1/2 Gal., Ea 103.95

6428R30 SILICONE FLUID, 5 Gal., Ea 799.00

JENCONS

MELTING POINT APPARATUS

Plateau facility for fast and accurate results



6428T30

- Programmable heating rates
- Maximum temperature 360°C
- Melt temperature storage
- Automatic cooling
- "User friendly" display

A membrane key pad allows easy setting of the desired start temperature and heating ramp rates. The user-friendly LCD advises both the temperature and the specific stage of operation. Clear observation of the samples and melt process is aided by a powerful magnifying lens and high intensity illumination. Temperatures may be stored in the instrument's memory by simply pressing the storage buttons. Once heating cycle is completed, an integral air pump quickly cools the heating block so that the next series of tests can be commenced properly.

SPECIFICATION

Number of Samples:	Three
Temperature Range:	Ambient to 360°C
Temperature Resolution:	0.1°C
Temperature Accuracy:	±0.5°C at 20°C
	±1.5°C at 360°C
Ramp Rates:	0.5° - 10°C per min in 0.1°C increments
Electrical Supply:	120 V, 60 Hz, 60 W

6428T50 MELTING POINT APPARATUS, 120 V, 60 Hz \$1,670.00

6428T52 MELTING POINT TUBES, Glass, Pk. 100 21.00

METTLER TOLEDO

AUTOMATIC MELTING POINT UNIT FP-62

Automatic, convenient and rapid melting point determination

- Easy to operate
- Accuracy of 0.1°C
- ISO 9001 certified

The automatic melting point apparatus makes it simple to find the purity determination or the identification of different samples. After entry of the start temperature and heating rate, the unit operates automatically to find the melting point determination.



6428T60

SPECIFICATIONS

Temperature Range:	Room temperature to 300°C
Heating Rate, in steps of 0.1°C:	0.1...10°C/minute
Max temperature gradients at 25°C Cooling from 300°C to 50°C Heating from 50°C to 300°C	Approx. 5 mins Approx. 3 mins
Temperature measurement	P1100
Correction of the measured temperature:	Proportional to the selected heating rate
Accuracy of the measured melting points at 0.2°C/min and 25°C ambient temperature Ambient temp to 200°C: 200 to 300°C: Repeatability:	±0.5°C ±0.5°C to 0.8°C (linear increase) 0.1°C
Admissible ambient temperature during operation:	10 to 40°C
Repeatability of a heated rate of 0.2°C/min, measured with samples of 99.9% purity:	±0.1°C
Sample tubes: glass sealed at one end:	Ø1.3 ± 0.15 mm, length approx 90 mm
Required amount of sample:	1 to 3 mg
Filling height:	3 to 6 mm
Capacity:	Approx. 10 samples/h
Tests:	Tested following current European and Canadian standards
Voltage, selectable:	100, 115, 230, 240 VAC +10 to -15%
Frequency:	50 to 60 Hz
Power load:	Max. 73 W
Dimensions (W x D x H):	240 x 285 x 125 mm
Weight:	5.6 kg

6428T60 MELTING POINT UNIT, Automatic..... 65,540.00

Accessories

6428T62	SAMPLE TUBES, Pk. 100	59.00
6428T64	SAMPLE TUBE RACK	34.80
6428T66	LIGHT BULBS, Pk. 3	39.47
6428T68	TEST STANDARD, Benzoic Acid	66.00

BARNSTEAD/THERMOLYNE

MEL-TEMP® CAPILLARY MELTING POINT APPARATUS

Provide precise melting point up to 500°C



6428U05

6428U09

- Castings conduct and radiate heat evenly to capillaries and thermometer
- Integrated light and 6x lens for enhanced sample observation
- Extruded aluminum housing

To use, insert charged capillaries and adjust the heating rate. When sample melts, record the temperature. Units accept up to three capillary tubes and each capillary is heated on three sides. Heating rate control is continuously adjustable with built-in variable transformer. The block is made from a highly conductive alloy to prevent hot spots. Durable, top quality components are mounted on a 1/8" thick aluminum panel. Panel markings are etched to prevent fading or wear. Dimensions (L x W x H, cm): 14 x 11 x 22. Power requirements: 100-120 V, 200 Watts or 210-250 V, 200 Watts.

All Mel-Temp units include a heat guard. Thomas numbers 6428U05 and U07 include a glass thermometer. Thomas numbers 6428U09 and U11 include a digital thermometer that uses a low mass thermocouple (that occupies the left capillary slot) to reduce thermal lag. This allows melting points to be determined faster without sacrificing accuracy. The thermometer has a resolution of 0.1°C. A "Hold" key allows uninterrupted observation of the sample.

6428U01	MEL-TEMP MELTING POINT APPARATUS, 120 V.....	660.00
6428U03	MEL-TEMP MELTING POINT APPARATUS, 230 V.....	690.00
6428U05	MEL-TEMP MELTING POINT APPARATUS, w/Glass Thermometer, 120 V.....	781.00
6428U07	MEL-TEMP MELTING POINT APPARATUS, w/Glass Thermometer, 230 V.....	791.00
6428U09	MEL-TEMP MELTING POINT APPARATUS, w/digital Thermometer, 120 V.....	1,178.00
6428U11	MEL-TEMP MELTING POINT APPARATUS, w/digital Thermometer, 230 V.....	1,178.00
6428U13	HEAT GUARD.....	92.90

BARNSTEAD/THERMOLYNE

**MEL-TEMP® 3.0 PROGRAMMABLE
CAPILLARY MELTING POINT APPARATUS***Programmable heating controls*

6428U15

- Rapid fan cooling
- Footprint is only 4.5" x 4.5"
- Temperature range: ambient to 400°C

Microprocessor controlled temperature ramping eliminates heating rate inconsistencies that occur with manually adjusted models. Ramping rates may be selected from 0.1°C to 10.0°C. The instrument automatically heats to, and holds, the selected ramp start temperature. Easy to follow directions are printed on the front of the unit. An audio-visual alarm indicates when oven temperature is stable. The onset and end of a melting range may be saved and then recalled later for recording. A high-speed fan cools the unit to the selected start temperature after each test. The temperature display can be calibrated without tools, using a melting point standard. A soft rubber eyecup eliminates ambient light glare. Units include 100 capillary tubes.

The precision machined aluminum block is several times more uniform than blocks in other melting point instruments. The unique geometry was optimized with computer modeling and then built, tested and refined to provide sharply defined melting range determinations.

6428U15	MEL-TEMP 3.0 MELTING POINT APPARATUS, 120V	.....	\$2,699.00
6428U17	MEL-TEMP 3.0 MELTING POINT APPARATUS, 230V	.....	2,836.00

KOEHLER

AUTOMATIC MELTING POINT APPARATUS

Precise temperature control gives reproducible results to within 1%



6428U20

- Conforms to BP Appendix 5-Method 6 and GLP specifications
- Readily interchanged between automatic and manual detection of melting point ranges
- Intelligent Lamp Intensity Control with Soft Start
- User-interactive software and data entry, including easy alphanumeric entry of sample name, ID number and date
- AUTO and MANUAL operating modes

The latest technology for microprocessor-based determinations of melting point ranges of crystalline, powdered and polymeric materials and is used to assess sample purity. Unit contains an automatic temperature safety cut-off feature if no melting points are detected 15°C above the expected melting point or if the oven reaches 315°C.

6428U20	AUTOMATIC MELTING POINT APPARATUS, 115 V, 60 Hz	.....	\$6,992.00
6428U21	AUTOMATIC MELTING POINT APPARATUS, 230 V, 50 Hz	.....	£,962.00

**Government Customers**

Thomas Scientific is considered a small business for government procurement purposes. For more information, call.

800 524 1364

◆ IMPAC cards accepted

◆ LIDS program participant

BACHARACH

MERCURY ANALYZER

The MAS-500 Mercury Analyzer

The MAS-500 complies with the EPA-approved Hatch-Ott Cold Vapor method of determining mercury concentrations and enhances the efficiency and accuracy of data collection and output capabilities.

Digital display with absorbance mode offers more consistent readability and repeatability, a recorder input, an RS 232 port and a polarity switch for easy lamp alignment.

- Utilizes the EPA-approved Hatch and Ott Cold Vapor method for mercury analysis
- Easy operation; needs little training, analyzes samples quickly and conveniently
- Features "PEAK HOLD" and push-button calibration
- Shows absorbance or %T readings
- Features sensitivity greater than 0.1 ppb
- Both analog and RS 232C outputs standard

The MAS-500 is comparable to the more expensive atomic absorption spectrophotometers, but it is simple, reliable and yields accurate and reproducible results. Comes complete with an internal pump, aerator, BOD bottle, desiccant with holder and associated tubing. Power requirements: 110/220 VAC, 50/60 Hz. Dimensions: 13" L x 11.5" W x 7.5" H (32 x 29 x 19 cm). Weight: 30 lbs. (13.6 kg).



6435M17

Reagents, for Mercury Analyzer



6435M33 and M37

SPECIFICATIONS

Wavelength:	253.7 nm
Sensitivity:	0.01 Micrograms mercury
Reproducibility:	±0.05 Microgram Hg at the 1 Microgram level
Flow Rate:	1.8±0.2 liter/minute, factory preset
Response Time:	<0.5 minute for full scale at 1.8 liter flow
Data Presentation:	Display has two modes: Absorbance: 0.000-2.500 A (nominal); %T: 0.0-100.0%T (nominal)
Mode Indicators:	Percent Transmittance, Absorbance, Peak Hold On
Status Indicators:	Peak Hold LED flashes when a peak maximum (Abs) or a peak minimum (%T) is being held and is continuously on when reading is increasing (Abs) or decreasing (%T). Operates only when the Peak Hold mode is selected. 100% T LED flashes when too little light is detected at the phototube during a Set 100%T operation. 0% LED flashes when too much light is detected at the phototube during a Set 0%T operation.
Manual Controls:	Push buttons for: percent transmittance display, Absorbance display, Set 100%T level, Set 0%T level, Peak hold on/off
Analog Output:	Two output voltage ranges: 0-1.0 V; 0-0.01 V

6435M17 MAS-500 MERCURY ANALYZER, 110/220 VAC, 50/60 Hz \$4,802.68

Replacement Parts for Mercury Analyzer (as provided with 6435M17)

6435M75	BUBBLER TUBE	.....	\$161.70
6435M82	MERCURY LAMP	.....	99.19
6435M88	PHOTO TUBE	.....	404.25

NOTE: substitution of 6435M72 Injection Bubbler allows vapor-tight syringe injection of reagents into sample bottle of this Mercury analyzer.

6435M21	POTASSIUM PERMANGANATE, 450 mL, BL.	.....	\$38.12
6435M25	SULFURIC ACID, 450 mL, BL.	.....	56.60
6435M29	NITRIC ACID, 450 mL, BL.	.....	63.53
6435M33	HYDROXYLAMINE, 450 mL, BL.	.....	56.80
6435M37	STANNOUS CHLORIDE, 450 mL, BL.	.....	75.06

Replacement Absorption Cell



6435M65

- For replacement on 6435M17 Mercury Analyzer
- Plastic; 155 mm long
- With removable quartz windows
- 6435M69 replacement windows include two gaskets

6435M65	ABSORPTION CELL	.....	\$127.05
6435M69	WINDOW KIT	.....	75.81



REAGENT INJECTION BUBBLER

For Mercury Analysis



6435M72

- Allows syringe injection of reagents into a closed, vaportight bottle assembly during mercury analysis
- Reagents injected by needle penetration of rubber stopper diaphragm; dispersed into sample through fritted bubbler tube
- Ground glass joint fits into neck on standard 300 mL BOD bottle (see Thomas number 1781N43)
- Air inlet and outlet, 5 mm o.d.; insert check valve for positive flow protection

With 6 rubber stoppers; syringe, bottle, connecting tubing and check valve not included.

6435M72 REAGENT INJECTION BUBBLER \$190.00

EXETER ANALYTICAL

SCHÖNIGER COMBUSTION IGNITER

Designed as a safe method of igniting samples when using the oxygen flask combustion procedure



6513C20

- Safe and reproducible
- Two tungsten-halogen lamps
- Aluminum chamber
- Thick, black acrylic observation window

Used for the determination of sulphur, halogens, phosphorus, fluorine, boron and some trace metals in organic materials. Reflectors focus the infrared heat from the lamps onto a small area approximately 10 cm above the center of the chamber. Lamps only operate when chamber door is fully locked. "START" switch fires lamps for 10 seconds (preset internally). In the event of a flask explosion, pressure is vented safely through holes in the chamber and any glass fragments are contained within the chamber. Metal cabinet has aluminum interior for rigidity and corrosion resistance.

Designed for use with Schöniger combustion flasks and accessories (6513C20 series) or Thomas-Ogg combustion apparatus (6514F10 series). Also suitable for use with Thomas-Lisk combustion apparatus.

WARNING: *intense explosions may occur when performing Schöniger combustion protocol.*

6513C05 IGNITER, Schöniger Combustion \$1,945.00
6513C06 LAMP, Replacement 105.00

Thomas Tips

Mercury Vapor



WARNING: Do not breathe mercury vapor. Inhalation of vapor is hazardous to your health. Use mercury only in areas of adequate ventilation. When mercury must be left exposed to the atmosphere during use, keep the exposed mercury covered with a layer of water to inhibit mercury vaporization. Clean up spillage immediately. Always store mercury in a strong, well-closed container.

Since 1900



Thomas Scientific (Arthur H. Thomas Co.) has been the one source for quality products and dependable service to the worldwide scientific community.

THOMAS-SCHÖNIGER

COMBUSTION FLASKS

- Rapid, simple and inexpensive technique for combustion analysis of organic materials in oxygen atmosphere
- For determination of sulfur, halogens, phosphorus, traces of metals, etc., in organic substances by combustion in oxygen
- Complies with ASTM Standard E 205

Procedure converts organic materials into soluble combustion products, which are then analyzed for chlorine, bromine, iodine, fluorine and sulfur by inorganic, gravimetric or volumetric methods. Combustion products are free from metallic contaminants. Heavy-wall conical flask, of borosilicate glass, has deep, bell-shaped, flaring lip. Elongated ground glass stopper has attached U-shape platinum wire gauze sample carrier. Specialty cut, unsized paper sheets serve as low ash wrappers for the sample (see Thomas number 6513C75). Flasks have 3/4" stopper with sealed-in platinum sample carrier and are furnished with pack of 100 sample wrappers. Model 6513C20 includes 6513C45 Flask and 6513C60 Stopper. Model 6513C30 includes 6513C50 Flask and 6513C65 Stopper.



6513C20

6513C20	COMBUSTION FLASK, 500 mL	380.00
6513C30	COMBUSTION FLASK, 1,000 mL	456.00

Replacement Flasks

- Conical, of heavy-wall borosilicate glass

All sizes have 3/4" ground joints and bell-shape lip 65 mm wide x 30 mm deep. 500 mL flask is 195 mm high; 1,000 mL flask, 230 mm. Without stopper or platinum carrier.

6513C45	FLASK, 500 mL	314.00
6513C50	FLASK, 1,000 mL	342.00

Flask Stoppers with Platinum Sample Carriers

- 6513C55 Stopper complies with ASTM E 205 for 500 mL combustion flasks; glass tip extends 40 mm below ground joint
- 6513C60 Stopper was traditionally offered by Thomas for 300/500 mL combustion flasks; glass tip extends 50 mm below ground joint
- 6513C65 Stopper is used for 1,000 mL combustion flasks; glass tip extends 90 mm below ground joint



6513C65

All feature U-shaped platinum gauze with 3 mm opening for insertion of the sample wrapper. For replacement Platinum Carrier, see Thomas number 6514F55.

6513C55	STOPPER, 500 mL	330.00
6513C60	STOPPER, 300/500 mL	625.00
6513C65	STOPPER, 1,000 mL	631.00

Platinum Sample Carrier

- Without stopper

Of heavier gauge wire than 6514F55, carrier supplied with Thomas-Schöniger flasks.

6513C70	SAMPLE CARRIER, 16 gauge	\$717.00
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White Sample Wrappers

- Of unsized, specially selected white paper, die-cut to facilitate wrapping, folding and igniting samples
- Sample area is 32 x 30 mm, with extended tail 38 mm long x 8 mm wide for flaming sample



6513C75

For black paper wrappers, see Thomas number 6514F70.

6513C75	SAMPLE WRAPPER, White, 100	\$38.70
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Polycarbonate Capsules

- Useful as sample containers for weighing and combustion of volatile liquids or hygroscopic samples in the Thomas-Schöniger Combustion Apparatus or other general combustion procedures to reduce weight changes during handling
- Schöniger procedure demands usual paper fuse for ignition
- 0.2 mL capacity
- No detectable sulfur
- 0.085% chlorine; 0.01% phosphorus; 0.036% nitrogen by the Kjeldahl method



6513C84

Diameter, 7 mm; length, 9 mm; weight, approximately 75 to 80 mg. Tops and bottoms separated.

6513C84	CAPSULES, 0.2 mL, Cl. 1,000	\$99.00
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THOMAS®-OGG

COMBUSTION FLASK

With Ball Joint Stopper



6514F10

- Conical, with $\frac{3}{8}$ 35/25 ball joint stopper
- Pinch clamp for securing stopper during combustion; release resulting vacuum by tilting stopper
- Hook below stopper takes detachable sample carrier of perforated platinum sheet 44 mm long x 9.5 mm wide, with loading chamber 13 mm deep

Includes stopper, platinum carrier (6514F45) and pinch clamp (281D141).

6514F10	COMBUSTION FLASK, 500 mL	.....	\$79.48
6514F20	COMBUSTION FLASK, 1000 mL	.....	722.79

Replacements And Accessories



6514F70

6514F30 and 6514F35 of borosilicate glass, with $\frac{3}{8}$ 35/25 socket mouth; without stopper or sample carrier.

6514F40 Stopper fits the 500 and 1,000 mL flasks; glass hook tip on lower end; platinum sample carrier not included.

6514F45 Sample Carrier, Ogg Type, supplied with 6514F10 and 6514F20; perforated platinum sheet; 13 mm deep

basket on lower end takes paper-wrapped sample.

6514F55 Sample Carrier, Schöniger Type, of 22-gauge platinum wire gauze; U-shaped, 12 x 12 mm, with 3 mm space between sides; 20-gauge wire stem forms into loop for hanging on stopper hook in Thomas-Ogg flask (see Thomas number 6513C70).

Black paper sample wrappers (6514F70) absorb heat quickly for infrared ignition; die-cut from unsized paper; sample area 32 x 30 mm, with 8 x 38 mm extending strip as fuse for ignition.

6514F30	FLASK, 500 mL	.....	\$130.00
6514F35	FLASK, 1,000 mL	.....	136.90
6514F40	STOPPER, 35/25	.....	101.75
6514F45	SAMPLE CARRIER, Ogg	.....	961.00
6514F55	SAMPLE CARRIER, Schöniger	.....	433.00
6514F70	SAMPLE WRAPPER, Black, Pr. 100	.....	36.50

PORTABLE MAGNIFIERS

Macroscope: for field or laboratory



6538X01



6538X05

- Extra wide field of view
- Positionally correct image
- Camera adaptable
- Excellent optical design
- Measuring reticle
- 25x fixed or 18 to 36x zoom magnification models

Simple, basic design offers ease of use without compromising optical or mechanical quality. Thomas numbers 6538X01 and X03 are fixed magnification units that provide 25x magnification over a field of view measuring approximately 8 mm ($\frac{1}{2}$ "₁₆). By removing the base and close-up lens, units can be used for fix distance viewing and for making distance or height approximations (formulas included).

Model 6538X01 includes a measuring reticle that incorporates both English and Metric scales. Model 6538X03 includes a measuring reticle that incorporates mils and inches. Thomas number 6538X05 provides variable magnification from 18x to 36x and incorporates a double reticle that provides accurate measurements (valid at either minimum or maximum magnification) in English and Metric units.

The Macrofile I portable light table measures approximately 3" diameter and provides light from below microscopes. The unit runs on batteries or the included AC adapter. It works with all Macroscopes.

The Macroamate I camera adapter couples any Macroscope to the 52 mm diameter threads of a 35 mm single reflex lens. Lenses of other diameters can be accommodated through the use of commonly available stepping rings.

The Hi-Intensity Illuminators are designed to provide extremely bright light. They are positioned around the base of the Macroscopic. Units are battery operated.

6538X01	MACROSCOPE, 25x, English/Metric	.....	\$168.00
6538X03	MACROSCOPE, 25x, Mils/Inches	.....	168.00
6538X05	MACROSCOPE, 18-36x, English/Metric	.....	759.00
6538X07	MACROFILE I LIGHT TABLE	.....	80.85
6538X09	MACROAMATE I CAMERA ADAPTER	.....	35.05
6538X11	HI-INTENSITY ILLUMINATOR, For 6538X05	.....	161.75
6538X13	HI-INTENSITY ILLUMINATOR, For 6538X01 and X03	.....	161.75

SPECWELL PORTABLE MICROSCOPES/TELESCOPES

Magnify up to 45X or view objects at a distance

- Lightweight
- Neck cord
- Durable carrying case

To use as a microscope, simply screw on the micro lens and the stand. To use as a telescope, remove the micro lens and stand. Scope, neck cord, lens and stand all fit in the carrying case. Scopes are constructed of attractive, durable aluminum and plastic and include lens covers and carrying case.



6538Y15

SPECWELL PORTABLE MICROSCOPES/TELESCOPES

THOMAS NO.	AS A MICROSCOPE			AS A TELESCOPE				DIMENSIONS (w/o Stand)	WEIGHT (lb.)	PRICE
	MAGNIFICATION (at highest)	FIELD OF VIEW (max.)	WORKING DISTANCE	MAGNIFICATION	FIELD OF VIEW	CLOSE FOCUS DISTANCE	OBJECTIVE LENS APERTURE			
6538Y15	20X	13.0 mm	3.1'	5X	10"	10.2'	16 mm	2.9" x 1.3"	0.20	\$150.00
6538Y18	35X	7.2 mm	2.5'	8X	7"	11.8'	20 mm	3.5" x 1.3"	0.18	150.00
6538Y21	40X	5.0 mm	2.5'	10X	6"	15.7'	20 mm	4.2" x 1.3"	0.18	155.00
6538Y24	40X	8.0 mm	2.5'	8X	8.3"	23.6'	30 mm	5.1" x 1.7"	0.42	160.00
6538Y27	45X	6.3 mm	2.5'	10X	6"	27.6'	30 mm	5.9" x 1.7"	0.51	175.00

SPECWELL PORTABLE MICROSCOPES

Built-in reticles are ideal for quality control and inspection

- Magnification: 25X
- Lightweight
- Durable carrying case with strap

Select from straight-line, square-mesh or circle-angle reticles. Scopes are constructed of attractive durable aluminum and plastic and include lens covers and carrying case.



6538Y33

SPECWELL PORTABLE MICROSCOPES/TELESCOPES

THOMAS NO.	RETICLE TYPE	MAGNIFICATION (at highest)	FIELD OF VIEW (max.)	WORKING DISTANCE	OBJECTIVE LENS APERTURE	DIMENSIONS (w/o Stand)	WEIGHT (lb.)	PRICE
6538Y30	Straight-line 1/20 mm scale	25X	9.0 mm	3.0	20 mm	3.5" x 1.1"	0.20	\$180.00
6538Y33	Straight-line 1/20 mm scale	25X	11.0 mm	3.0	30 mm	5.1" x 1.7"	0.17	200.00
6538Y36	Circle-angle 1/10 mm scale	25X	9.0 mm	3.0	20 mm	3.5" x 1.1"	0.18	200.00
6538Y39	Square-mesh 1/10 mm scale	25X	9.0 mm	3.0	20 mm	3.5" x 1.1"	0.42	200.00

SWIFT

MICROSCOPES

FM-31 LWD



6539A30

- Inverted microscope gives you all the precision of a full-size lab microscope in a palm-size package, weighing less than 2 lbs
- Ideal for use by veterinarians, science educators, students, biologists and industrial hygienists
- Both brightfield or phase objectives and standard 160 mm tube length
- Special long working distance (LWD) objectives allow you to

work through the thickness of a glass slide when using wet mounts

- Illumination is provided by daylight or battery-powered incandescent lamp

Supplied with 4X, 10X and LWD 40X objectives, 10X WFF 15.5 mm eyepiece with case and illuminator with bracket and case.

6539A30 MICROSCOPE \$703.00

GH Monoscope, an inexpensive microscope for education and industry



6539A60

- Plants, insects, prepared slides are but a few of the possible specimens used with this lightweight, portable microscope
- Features an easily focusable tube for magnification ranging from 25X (Standard), 160 mm optical tube length is the same as found on standard compound microscopes
- Locked eyepiece is widefield; options are extra-widefield or Huygenian eyepiece
- Durable, metal construction and reagent-proof enamel finish

With an achromat objective and instant conversion to a 45 mm DIN system, this instrument is truly

upgradable. With the black and white contrast plate and optional stage clip version available, the GH Monoscope adapts well to a variety of lighting situations.

6539A60 MICROSCOPE, Model GH \$106.00

SWIFT

STEREO MICROSCOPES

SM90-HF Series Stereo Microscopes



6539B33

- Extra-wide, locked-on eyepieces
- Extra large, 90 mm diameter stage
- Left eye-diopter for custom eye focus
- 360° rotatable body

Eyepieces are mounted at a comfortable 45° angle. Eye-guards promote comfortable viewing for eyeglass wearers. Turret-type objective housing offers easy magnification changes. All optical surfaces are hard-coated to reduce reflections and increase light transmissions. Body accommodates Swift HF, current BF and industrial pods. Cord hanger provides neat and convenient cord storage.

Two separate on/off switches located at the foot of the arm provide 3-way illumination. Adjustable, 6 V, 20 W halogen incident top light angle and brightness are both adjustable. The in-base, 5 W, 4,100 K fluorescent illumination provides economical, "cool" light. Lamp replacement is simple for both top and bottom light.

THOMAS NO.	SWIFT MODEL	OBJECTIVE	EYEPIECE	TOTAL MAGNIFICATION	FIELD OF VIEW	PRICE
6539B33	SM9190HF	1X FN 23	W10X FN 23	10X 20X	25 mm, 11.5 mm	\$791.00
6539B36	SM9390HF	1X 3X	W10X FN 23	10X 30X	22 mm, 7.67 mm	796.00
6539B39	SM9890HF	2X 4X	W10X FN 23	20X 40X	11.5 mm, 5.75 mm	813.00

Stereo Zoom Microscope MZ 891 (8 to 40X magnification)



6539C30

- Inclined stereo zoom body, rotatable 360°, with a standard magnifying range of 0.8X through 4X
- Diopter correction on both eyepiece tubes
- Parfocal from high to low power
- Widefield eyepiece W10 x FN 20 standard

Ideal for industrial, medical or educational applications. Microscope includes halogen high intensity illuminator. The diopter controls are internally geared one to the other.

Magnification may be increased up to 160X with optional eyepieces and supplementary lenses. Other eyepieces are available: 5X, 15X and 20X. Other components and accessories are available on special order to allow several different configurations. Request additional information.

6539C30 MICROSCOPE \$2,066.00

SWIFT

MICROSCOPES

Monocular Microscope

- Convenient, durable and versatile, this microscope is ideal for use with students
- Pointmaster™ eyepiece for measuring specimens
- Easy bulb replacement
- Objective 4X, 10X, 40X
- Eyepiece W10X

This microscope has a student-proof design that is cost effective and eliminates the possibility of tampering or theft. Features include a one-piece eyetube and condenser housing and a locked-on eye tube and stage clips. Ultra-Lite™ illuminator has bright, cool fluorescent light; 0.65NA condenser for versatility. Unique "C-wrench" keeps control of focusing tension in the teacher's hand. Electrical cord is grommeted to the base to avoid cord detachment and the cord-hanger allows for safe and hassle-free storage. Reversed nosepiece allows for easy slide changing and plastic shield protects iris diaphragm. Limited Lifetime Warranty. UL/CUL-approved electrical system.



6539C70

6539C70 MICROSCOPE, M0200F \$346.00

M7000D Advanced Binocular Microscope

- Standard 80-85% flatfield, Semi-Plan objectives
- Dual, widefield 10X, 18 mm, Din eyepieces with pointer
- 45° inclined body with eyepiece diopter ring and scale
- Fine focus knob is color-coded (red) for easy identification
- All body options are 360° rotatable

Interpupillary distance gauge on body allows customized inter-eye adjustment. Built-in low-drive, mechanical stage with smooth-moving, coaxial controls. One-piece field condenser housing consolidates base into one solid unit.

"Quick focus" coaxial fine and coarse focus system facilitates smooth focusing. N.A. 1.25 spiral mount condenser with iris diaphragm and filter carrier. Light source is variable, 12 V, 20 W halogen. Reverse revolving nosepiece makes slide changing effortless. Cord hangers are installed on back of arm for convenient electrical cord storage.



6539C75

THOMAS NO.	SWIFT MODEL	OBJECTIVE	EYEPIECE	CONDENSER	PRICE
6539C75	M7000D	4X, 10X, 40X, 100XRD	W10X DIN, 18 mm (Paired)	Abbe DIN N.A. 1.25 Sub-Stage	\$985.00

M4000D Series High Performance Microscopes

- High performance without the high price tag
- Ideal for laboratory, medical and educational applications
- Inward-facing nosepiece and objectives give you clear access to the stage, making this series convenient, comfortable and easy to use
- Binocular body, inclined at 45° and rotatable 360° for comfortable viewing; maintains parfocality at interpupillary distances from 53 to 73 mm and features dual eyepiece diopter adjustments for maximum acuity
- DIN objectives are mounted on 360° revolving reversed angle; Achromat and Flatfield MicroPlan, both of which render crisp, color-corrected images, are available
- W10X, 18.5 mm DIN eyepieces are available
- Illuminator provides high level illumination and furnishes excellent color temperature for darkfield, phase contrast, brightfield and photomicrography
- Provides a large 140 x 160 mm stage that rises smoothly on cross bearings with no lateral movement; both left and right hand activated controls are provided for precision and comfort



6539D90

Two types of condensers are available: the Abbe N.A. 1.25 condenser with iris and filter carrier, which provides optical matching and critical focus with any illumination; or the N.A. 1.25 Quodmaster condenser, which allows instant movement from Brightfield to Darkfield to Phase 10X, 40X and 100X on the 6539D90.

All instruments finished in epoxy-ester resin that is acid and reagent resistant. Optional components and accessories (such as eyepieces, objectives and a trinocular head) are available on special order.

HIGH PERFORMANCE MICROSCOPES

THOMAS NO.	SWIFT NO.	DIN OBJECTIVES	CONDENSER	ILLUMINATOR	PRICE
6538D30	M4002D	4X, 10X, 40XRD, 100XRD Achromat	Abbe DIN N.A. 1.25	Built-in, 6 V, 20 W Halogen	\$2,101.00
6530060	M4003DM	4X, 10X, 40XRD, 100XRD MicroPlan	Abbe DIN N.A. 1.25	Koehler 6 V, 20 W Halogen	3,455.00
6530090	M4004CP	4X, 10X, 40XRD, 100XRD Achromat	Quodmaster 100 N.A. 1.25	Built-in, 6 V, 20 W Halogen	2,988.00



MICROSCOPES

Compound Microscopes



6540K25

- Available in monocular, binocular and trinocular styles
- 10X WideField eyepieces (DIN)
- 6 V/20 W variable quartz halogen light source
- Quadruple, reversed, extra-large, ball-bearing nosepiece

Exceptional quality and economical pricing make these microscopes ideal for the clinical, industrial or educational setting. Nosepiece features high-grade lubricant and positive stops. Feature coaxial, low-position coarse and fine focus controls which are graduated to 2 microns per division. Focus controls include coaxial, low-position coarse and fine focus controls and are graduated to two microns per division. The focus controls are also fitted with tension adjustment and safety autostop and have a 40 mm focusing range. The stable base is 180 x 210 mm and has anti-skid rubber feet. Body is constructed of cast metal, with black hand rests and stain-resistant enamel finish. The graduated integrated mechanical stage (125 x 135 mm) has right-hand coaxial drop-down X-Y controls and a 30 x 70 mm movable range. Dimensions (L x W x H, mm): 210 x 180 x 380; weight: 7 kg (binocular models). Electrical requirements: 110 V, 50/60 Hz (240 V models available).

SPECIFICATIONS:

Model:	Brightfield	Phase Contrast
Viewing Head:	Seleniopic head, 30° inclination; 360° Rotatable head; diopter (-6 to +6) and interpupillary adjustment (55-75 mm) mechanisms; erect imaging; multiple-coated transmission prism system. Phase contrast models also feature a centering telescope.	
Objectives:	DIN achromatic or plan-achromatic: 4X/0.10, 10X/0.25, 25X/0.40, 40X/0.65 and 100X/1.25 (Oil)	DIN achromatic or plan achromatic: 10X/0.25, 20X/0.40, 40X/0.65 and 100X/1.25 (Oil) (25X/0.40 plan achromatic models)
Condenser:	1.25 N.A. Abbe condenser with iris diaphragm easily centered with spring-locked knobs and focusable with rack and pinion substage; swing-in color filter.	Zamike-style with phase annulus rings for 10X, 25X, 40X and 100X ("0" setting for brightfield); iris diaphragm and swing-in color filter; centerable condenser mount and easily aligned annulus rings with knurled alignment knobs.
Filters:	Blue and neutral density	Blue, green and neutral density

Brightfield

6540K21	MICROSCOPE, Monocular, Achromatic	\$509.00
6540K23	MICROSCOPE, Monocular, Plan Achromatic	654.00
6540K25	MICROSCOPE, Binocular, Achromatic	754.00
6540K27	MICROSCOPE, Binocular, Plan Achromatic	1,094.00
6540K29	MICROSCOPE, Trinocular, Achromatic	829.00
6540K31	MICROSCOPE, Trinocular, Plan Achromatic	1,164.00

Phase Contrast

6540K33	MICROSCOPE, Monocular, Achromatic	\$939.00
6540K35	MICROSCOPE, Monocular, Plan Achromatic	1,204.00
6540K37	MICROSCOPE, Binocular, Achromatic	1,189.00
6540K39	MICROSCOPE, Binocular, Plan Achromatic	1,524.00
6540K41	MICROSCOPE, Trinocular, Achromatic	1,254.00
6540K43	MICROSCOPE, Trinocular, Plan Achromatic	1,629.00

5 Year Limited Warranty

Thomas Scientific Microscopes are warranted by Thomas Scientific, Inc. to be free from defects in material and workmanship for a period of five (5) years from the date of purchase, except for electrical components which have a one (1) year limited warranty. During this period, Thomas Scientific, or its authorized service station, will at their option and without charge, either repair or replace any part found to be defective in materials or workmanship.

For more information, contact Thomas Scientific.

Immersion Oil

Our immersion oil can be found in the chemical section, starting with Thomas number C409K10.



MICROSCOPES

Stereo Zoom Microscopes

- Available in binocular and trinocular styles
- 10X WideField eyepieces
- Three-way illumination switch

The precision optics in these stereoscopes produce high resolution, three dimensional images at an affordable price making them ideal for the clinical, industrial, or educational setting. Optional eyepieces and supplementary lenses are available to customize any model for specific magnification requirements. Viewing head provides a large field of view and a long working distance. Zoom optics have smooth turning, dual, side-mounted zoom controls. Focusing movement consists of coaxial, rack and pinion focusing controls; tension control mechanism to prevent drifting; slip-clutch mechanism to protect the gears and 85 mm vertical travel. The stable 280 x 255 mm base has anti-skid rubber feet and the body is constructed of cast metal and stain-resistant enamel finish. 3-way illumination switch allows the upper and lower illumination to be on separately or simultaneously.



6540K45

Unit supplied with frosted glass stage plate and black/white reversible stage plate. Electrical requirements: 110 V, 50/60 Hz (240 V models available).

SPECIFICATIONS:

Thomas No.:	6540K45, K47	6540K49, K51
Viewing Head:	45° inclination; 360° rotatable head; dual diopter (-5 to +5) and interpupillary adjustment (55-77 mm) mechanisms	
Zoom Optics:	0.7X to 4.3X primary magnification; provides a nominal total magnification range of 7X to 45X	
Illumination:	Upper: 6 V/15 W Halogen Lower: 5 W Fluorescent	Upper: 6 V/15 W Halogen Lower: 6 V/15 W Halogen

6540K45	MICROSCOPE, Binoc, Halogen (U), Fluor (L) Illum.	\$682.00
6540K47	MICROSCOPE, Trinoc, Halogen (U), Fluor (L) Illum.	\$722.00
6540K49	MICROSCOPE, Binoc, Dual Halogen Illumination.	\$822.00
6540K51	MICROSCOPE, Trinoc, Dual Halogen Illumination.	\$822.00

Stereo Microscopes

- Available in binocular style
- 10X WideField eyepieces
- 6 V/15 W variable quartz halogen light source for upper illumination
- Three-way illumination switch



6540K53

Viewing head large field of view and a long working distance. Stereo optics have dual power, revolving turret objectives and are parfocal and parcentered. Focusing movement consists of coaxial, rack and pinion focusing controls; tension control mechanism to prevent drifting; slip-clutch mechanism to protect the gears. Stable 165 x 220 base has anti-skid rubber feet and the body is constructed of cast metal and stain-resistant enamel finish. 3-way illumination switch allows the upper and lower illumination to be on separately or simultaneously.

Unit supplied with frosted glass stage plate and black/white reversible stage plate. Electrical requirements: 110 V, 50/60 Hz (240 V models available).

SPECIFICATIONS:

Thomas No.:	6540K53 through K59	6540K61 through K67
Viewing Head:	45° inclination; 360° rotatable head; diopter (-5 to +5) and interpupillary adjustment (51-77 mm) mechanisms	
Illumination:	Upper: 6 V/15 W Halogen Lower: 6 V/15 W Halogen	Upper: 6 V/15 W Halogen Lower: 5 W Fluorescent

Dual Halogen Illumination

6540K53	MICROSCOPE, 1X and 2X	\$380.00
6540K55	MICROSCOPE, 1X and 3X	\$400.00
6540K57	MICROSCOPE, 2X and 4X	\$400.00
6540K59	MICROSCOPE, 1X and 4X	\$400.00

Halogen (Upper), Fluorescent (Lower) Illumination

6540K61	MICROSCOPE, 1X and 2X	\$380.00
6540K63	MICROSCOPE, 1X and 3X	\$400.00
6540K65	MICROSCOPE, 2X and 4X	\$400.00
6540K67	MICROSCOPE, 1X and 4X	\$400.00



MICROSCOPES

Inverted Microscopes



6540K69

- 10X WideField eyepieces (DIN)
- Overhead 6 V/20 W variable quartz halogen light source
- 40 mm focusing range

Ideal for observation of cultures or specimens within petri dishes or vials or any other application requiring the need for long working distance. Quadruple, extra-large, ball-bearing nosepiece has wide, knurled grip for easy operation and features high-grade lubricant and positive

stops. Graduated, integrated mechanical stage (200 x 150 mm) has right-hand coaxial drop-down X-Y controls and 30 x 70 mm movable range. Focusing movement consists of coaxial, low-position coarse and fine focus controls; graduated to 2 microns per division, fitted with tension adjustment and safety autostop. Condenser is easily centered with spring-loaded knobs and focusable with rack and pinion mechanism. Condenser includes a swing-in color filter. Body is constructed of cast metal, stain-resistant enamel finish and has black hand rests. Stable 180 x 210 mm base has anti-skid rubber feet. Supplied with blue and neutral density filters. Electrical requirements: 110 V, 50/60 Hz (240 V models available).

SPECIFICATIONS:

Thomas No.:	6540K69	6540K71
Viewing Head:	Seleniograph head; 30° inclination; 360° rotatable head; diopter (-5 to +5) and interpupillary adjustment (55-75 mm) mechanisms; erect imaging; multiple coated transmission prism system	Seleniograph head; 30° inclination; 360° rotatable head; diopter (-5 to +5) and interpupillary adjustment (55-75 mm) mechanisms; erect imaging; multiple coated transmission prism system
Objectives:	DIN plan-achromatic 10X/0.25, 25X/0.40 and 40X/0.65 brightfield objectives	DIN plan-achromatic 10X/0.25, 25X/0.40 and 40X/0.65 phase contrast objectives
Condenser:	0.40 N.A. long working distance (30 mm) condenser with iris diaphragm	Separate sliding glass annular (10X, 25X and 40X) for each objective

6540K69 MICROSCOPE, Inverted, Brightfield, Plan Achrom. \$2,250.00

6540K71 MICROSCOPE, Inverted, Phase Contrast, Plan Achrom. 2,695.00

Industrial/Metallurgical Microscope



6540K72

- 10X WideField eyepieces (DIN)
- 6 V/20 W variable quartz halogen light source
- Quadruple, reversed, extra-large, ball-bearing nosepiece with wide, knurled grip for easy operation

Microscopes feature both transmitted and incident illumination making them ideal for working with opaque samples. Stage: graduated, integrated mechanical stage (185 x 140 mm); glass insert (98 x 77

mm); right-hand coaxial drop-down X-Y controls; 53 x 77 mm movable range. Focusing movement consists of coaxial, low-position coarse and fine focus controls; graduated to 2 microns per division; fitted with tension adjustment and safety autostop; and 40 mm focusing range. Condenser is easily centered with spring-loaded knob and is focusable with rack and pinion mechanism.

Equipped with incident illumination system with four-color filter wheel and polarizing filter. Body is constructed of cast metal, stain-resistant enamel finish and has black hand rests. Electrical requirements: 110 V, 50/60 Hz (240 V models available).

SPECIFICATIONS:

Viewing Head:	Seleniograph binocular head; 30° inclination; 360° rotatable head; diopter (-5 to +5) and interpupillary adjustment (55-75 mm) mechanisms; erect imaging; multiple coated transmission prism system.
Objectives:	DIN plan-achromatic 4X/0.10, 10X/0.25, 40X/0.65 and 100X/1.25 (Oil)
Condenser:	1.25 N.A. Abbe Brightfield with iris diaphragm

6540K72 MICROSCOPE, Reflected/Trans Illum, Plan \$1,850.00



MICROSCOPES

Epi-Fluorescent Microscopes

- 10X WideField eyepieces (DIN)
- 6 V/20 W variable quartz halogen lower light source; 100 W HBO Mercury upper light source



6540K73

Features both transmitted and incident illumination, are perfect for brightfield and fluorescence applications. Viewing head features two slide-in filter cubes that can be moved into the light path independently for simple operation and crucial flexibility. Quadruple, extra large, ball-bearing nosepiece with wide, knurled grip for easy operation; features high-grade lubricant and positive stops. Stage is graduated, integrated mechanical right-hand coaxial drop-down X-Y controls; 30 x 70 mm movable range. Focusing movement is coaxial, low-position coarse and fine focus controls; graduated to 2 microns per division; fitted with tension adjustment and safety autostop; with 40 mm focusing range. Brightfield condenser is easily centered with spring-loaded knobs and focusable with a rack and pinion mechanism. Phase contrast condenser is centerable and the annulus rings can be easily aligned with knurled alignment knobs. Epi-Fluorescent illumination system consists of condenser, iris diaphragm; neutral density filter wheel and polarizing filter. Upper illumination is 100 W HBO mercury light source; mounted in the rear of the microscope, protected by a sturdy, all-metal housing. Lamp is focusable and centerable and there is an external power supply for constant even light. Lower illumination is 20 W variable quartz halogen. Body is constructed of cast metal, stain-resistant enamel finish and is equipped with black hand rests. Electrical requirements: 110 V, 50/60 Hz (240 V models available).

SPECIFICATIONS:

Thomas No.:	6540K73	6540K74
Viewing Head:	Seidentopf trinocular head, 30° inclination; 360° rotatable head; diopter (-5 to +5) and interpupillary adjustment (35-75mm) mechanism; erect imaging; multiple-coated transmission prism system.	
Objectives:	DIN plan-achromatic 10X/0.25 and *100X/1.25 (Oil) brightfield objectives.	
Condenser:	1.25 N.A. Axioc brightfield condenser with iris diaphragm and swing-in color filter	Zenlike-style phase contrast condenser with phase annulus rings for 10X, 20X, 25X, 40X and 100X (10° setting for brightfield); iris diaphragm and swing-in filter holder
Filters:	Blue and neutral density	Blue, green and neutral density

6540K73 MICROSCOPE, Epi-Fluorescent, Brightfield, Plan, Achromatic \$3,535.00

6540K74 MICROSCOPE, Epi-Fluorescent, Phase Contrast, Plan, Achromatic 4,570.00

VEE GEE

VIDEO CAMERA PACKAGE

Camera, adapter and lens in one package



6540K90



6540K93

- Fits Thomas Trinocular Microscopes
- Adaptable to most other microscopes

A complete microscope video system can be assembled using a trinocular microscope, one of these camera packages and a suitable monitor. All adapters, photographic lenses and cables to combine with a Thomas Microscope are included. For other brand microscopes, please call for appropriate mounts.

Color monitor/receivers are 20" and 13" diagonal with RCA type AV input jacks for use with CCD cameras. Resolution up to 500 lines per inch. 110 VAC.

6540K90 CAMERA PACKAGE, For Compound Microscopes, 110 V \$1,495.00

6540K93 CAMERA PACKAGE, For Compound Microscopes, 220 V 1,760.00

6540K96 CAMERA PACKAGE, For Stereo Zoom Microscopes, 110 V 1,495.00

6540K99 CAMERA PACKAGE, For Stereo Zoom Microscopes, 220 V 1,760.00

6540K91 20" COLOR MONITOR/RECEIVER 399.95

6540K93 13" COLOR MONITOR/RECEIVER 279.95



Thomas Tips Interpupillary Adjustment

Slider head: makes the interpupillary adjustment by sliding the eyetubes apart along a horizontal plane. An adjustment is then needed for distance moved away from the prism.

Seidentopf Head: makes the adjustment by revolving the eyepieces on an axis. Distance from eyepiece to prism does not change, so no adjustment is necessary.

MOTIC

DIGITAL MICROSCOPES

Microscope and video camera in one package



6552V36

- Plug and play simplicity
- User-friendly software
- Full range of accessories

Motic combines advanced laboratory microscopes with high resolution CCD cameras to create digital microscope systems. The CCD camera is factory-installed in the microscope's vertical trinocular tube, and an image capture device and digital converter are mounted in the microscope. The resulting integrated system eliminates the need for adapters and adjusting the focal length to match video and visual images. Motic 2000 software (included) allows storage of JPG, BMP and MIG (for recording) formats, has pull-down menus for opening, storing, previewing, printing, brightness regulator, color, gamma correction and icons for recording, image interpolation, switching image size, image quality, automatic and manual white balance. Easy calibration process enables measuring of length and area of elliptical, rectangular or irregular shapes. Package includes Motic 2000 software and all necessary cables.

CAMERA SPECIFICATIONS

Connections:	USB, S-Video, RCA
Image Device:	1/3" Inteline CCD
Signal:	Analog with grabber
Effective Pixels (USB):	712(H) x 582(V)
Framed Resolution (NTSC):	480 TV Lines
Electronic Shutter (USB):	30 frames/sec
Image Data:	Automatic Reference # Date, Time
Minimum Hardware Requirements:	CPU: 200 MHz; 64 MB RAM; 200 MB available hard disk space; Windows™ 98 or Higher; Available USB port



6552V27

Model DMB1 (6552V26) Digital Compound Microscope has a 30° inclined Sticker trinocular head, 10X Wide Field (18 mm) Eyepieces, efficient 12 V/20 W halogen illuminator with intensity control and centerable 1.25 N.A. Abbe condenser. Low position mechanical stage allows quick scanning and marking of specific areas. Achromatic Super Contrast (ASC) 4X, 10X, 40X and 100X (oil) objectives provide brilliant sharp images with excellent contrast. The quadruple nosepiece has a ribbed grip for easy rotating.

Model DMB3 (6552V27) Digital Compound Microscope has a 30° inclined Siedentopf head and a built-in field of view diaphragm ensuring correct positioning of the condenser, according to Koehler, for perfect illumination, 10X Wide Field (20 mm) Eyepieces, efficient 12 V/20 W halogen illuminator with intensity control and centerable 1.25 N.A. Abbe condenser, low position mechanical stage and Achromatic Super Contrast (ASC) 4X, 10X, 40X and 100X (oil) objectives. The reversed quintuple nosepiece has a ribbed grip for easy rotating.

Model DM143 (6552V36) Digital Stereo Zoom Microscopes have 45° inclined eye tubes with diopter adjustment on both. The continuous Zoom of 1X to 4X (10 to 40X with 10X eyepieces) produces sharp, erect images. Includes Strong Incident (12 V/15 W) and transmitted (12 V/10 W) light with intensity controls. Illuminators can be used independently or simultaneously. Rugged, die cast metal construction.

6552V26	DIGITAL MICROSCOPE, DMB1	\$1,739.00
6552V27	DIGITAL MICROSCOPE, DMB3	1,995.00
6552V36	DIGITAL MICROSCOPE, DM143	1,805.00



Thomas Tips

Numerical Aperture

Numerical Aperture (N.A.) is a measure of an objective's resolving ability. The higher the N.A., the more that can be resolved, i.e. a 40X objective with a N.A. Of 0.70 would resolve more than a 40X objective of 0.65 N.A.

MOTIC

MICROSCOPES

B1 Series Student Grade Compound Microscope

- 30° inclined slider head, 360° rotatable
- Quadruple nosepiece
- Binocular or trinocular

Model B1 microscopes feature 12V/20W halogen illuminators with intensity control and focusable, centerable 1.25 N.A. Abbe condensers for critical illumination. 10X Wide Field (18 mm) eyepieces provide a large field of view. Diopter and interpupillary adjustment (with correction scale) included. Graduated mechanical stage with low position controls allow one hand search/focus. Stage moves smoothly and effortlessly to mark and relocate areas of interest. Achromatic Super Contrast (ASC) 4X, 10X, 40X and 100X (oil) objectives provide brilliant, sharp images with excellent contrast and definition. Supplied with objectives, eye guards, blue filter, dust cover and immersion oil.



6553A07

6553A01	MICROSCOPE, Achromatic, Binocular	.....	\$95.00
6553A03	MICROSCOPE, Achromatic, Trinocular	.....	1,045.00

B3 Series Advanced Professional Compound Microscope

- 30° inclined Seidentopf head, 360° rotatable
- Quintuple nosepiece
- Binocular or trinocular

B3 microscopes include all the features of the B1 series. 10X Wide Field (20 mm) eyepieces provide a larger field of view than the B1 series. Built-in diaphragm enables the user to set up Koehler illumination. Seidentopf head allows easy interpupillary adjustment without requiring correction adjustments.



6553A10

6553A10	MICROSCOPE, Achromatic, Binocular	.....	\$1,100.00
6553A15	MICROSCOPE, Achromatic, Trinocular	.....	1,250.00
6553A20	MICROSCOPE, Plan Achromatic, Binocular	.....	1,245.00
6553A25	MICROSCOPE, Plan Achromatic, Trinocular	.....	1,335.00
6553A30	MICROSCOPE, Plan Achromatic, 40XPH, Binocular	.....	1,330.00
6553A35	MICROSCOPE, Plan Phase, Binocular	.....	1,795.00

MOTIC

MICROSCOPE ACCESSORIES

Accessories for Compound Microscopes



6553A40 series



6553A50 series

The following accessories may be used with the DMB1, DMB3, B1 and B3 series microscopes unless otherwise noted.

Widefield Eyepieces

6553A40	EYEPIECE, Wide Field, 10X/18 mm, For B1, DMB1, Each	.....	\$40.00
6553A42	EYEPIECE, Wide Field, 10X/20 mm, For B3, DMB3, Each	.....	45.00
6553A44	EYEPIECE, Wide Field, 15X/12 mm, Each	.....	42.00
6553A46	EYEPIECE, Wide Field, 20X/11 mm, Each	.....	44.00
6553A48	EYEPIECE, Microretic, 10X/18 mm, 100 Divisions/10 mm, Each	.....	60.00

Achromatic Super Contrast Objectives

6553A50	OBJECTIVE, ACS, 4X/0.10 N.A., Each	.....	\$35.00
6553A52	OBJECTIVE, ACS, 10X/0.25 N.A., Each	.....	60.00
6553A54	OBJECTIVE, ACS, 40X/0.65 N.A., Spring, Each	.....	85.00
6553A56	OBJECTIVE, ACS, 100X/1.25 N.A. (oil), Spring, Each	.....	130.00

Plan Achromatic Objectives

6553A58	OBJECTIVE, Plan Achromatic, 4X/0.10 N.A., Each	.....	\$50.00
6553A60	OBJECTIVE, Plan Achromatic, 10X/0.25 N.A., Each	.....	95.00
6553A62	OBJECTIVE, Plan Achromatic, 20X/0.45 N.A., Each	.....	115.00
6553A64	OBJECTIVE, Plan Achromatic, 40X/0.65 N.A., Spring, Each	.....	130.00
6553A66	OBJECTIVE, Plan Achromatic, 60X/0.85 N.A., Spring, Each	160.00
6553A68	OBJECTIVE, Plan Achromatic, 100X/1.25 N.A. (oil), Spring, Each	200.00

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Thomas Tips

Plan Achromatic

Achromatic means corrected for color, Plan Achromatic means corrected for color and flatness of field.

MOTIC

MICROSCOPE ACCESSORIES (continued)

Phase Contrast Accessories



6553A72

Complete Phase Kit consists of centerable five position condenser with brightfield, 10X, 20X, 40X and 100X Plan Phase objectives and corresponding phase rings, centering Phase Telescope, applicable filters and storage case.

6553A70	PHASEKIT, For B1 Microscopes, Complete, Each	\$1,050.00
6553A72	PHASE KIT, For B3 Microscopes, Complete, Each	1,050.00
6553A74	OBJECTIVE, Plan Phase, 10X/0.25 N.A., Each	95.00
6553A76	PHASE ATTACHMENT, 10X, Simple Plug-In Type, Each	40.00
6553A80	OBJECTIVE, Plan Phase, 40X/0.65 N.A., Each	190.00
6553A82	PHASE ATTACHMENT, 40X, Simple Plug-In Type, Each	40.00
6553A84	CENTERING TELESCOPE, Phase, Each	90.00

Other Accessories



Polarizing Sets (6553A88 and A90) consist of Polarizer, analyzer and 360° graduated rotating table.

6553A88

6553A86	DARKFIELD ATTACHMENT, Simple Plug-In Type, Each	\$90.00
6553A88	POLARIZING SET, Simple Add-On Type, For B1, Each	65.00
6553A90	POLARIZING SET, Simple Add-On Type, For B3, Each	65.00
6553A92	PHOTO ADAPTER, 2.5X, Each	110.00
6553A94	CCD ADAPTER, 0.5X, Fixed, Each	30.00
6553A96	CARRYING CASE, Aluminum	90.00
6553A98	HALOGEN BULB, Replacement, 12V/20W	11.00

MOTIC

SMZ SERIES STEREO ZOOM MICROSCOPES



6553J00

- Binocular or Trinocular
- Include Stand and Illumination
- 1:4 Zoom Range

Brilliant, sharp images, up to 200 lines per mm resolution, with economically priced stereo zoom microscopes. Continuous parfocal zoom range of 1X to 4X (2.5X to 120X depending on eyepieces and auxiliary lens used). Complete sets include 360° rotatable, 45° inclined body, diopter adjustment on both eyetubes, interpupillary distance adjustment from 54mm to 76mm, 10X / 20 mm field-of-view widefield

eyepieces (pair) and 1X auxiliary lens, built-in three way variable intensity incident and transmitted light, focusing mount, stand and dust cover.

SMZ140-N2GG has a binocular head, N2GG base stand (140 x 190 mm) with focusing mount and 12V/15W incident - 12V/10W transmitted illumination. SMZ143-N2GG is the trinocular version and includes CCD and photo adapters.

SMZ140-FBGG has a binocular head, FBGG large base stand (300 x 190 mm) with focusing mount and 12V/10W incident and transmitted light. SMZ143-FBGG is the trinocular version and includes CCD and photo adapters.

6553J85	MICROSCOPE, Binocular Stereo Zoom, Complete, N2GG Stand	\$795.00
6553J10	MICROSCOPE, Binocular Stereo Zoom, Complete, 10GG Stand	975.00
6553J15	MICROSCOPE, Binocular Stereo Zoom, Complete, FBGG Stand	965.00
6553J20	MICROSCOPE, Trinocular Stereo Zoom, Complete, FBGG Stand	1,145.00



Thomas Tips Lens Cleaning

Do not use canned or compressed air to blow dust from your microscope. A soft bristle brush or a bellows brush should be used. For removing smears or oil from optics, use an optics cleaning solution with lens tissue or cotton swabs. Thomas offers a kit for correct lens cleaning that contains a bellows brush, cleaning solution, lens wipes and cotton swabs (0881B52).

MOTIC

SMZ SERIES STEREO ZOOM MICROSCOPES

Auxiliary Lenses and Eyepieces For SMZ Series Stereo Zoom Microscopes



6553J25 series

SMZ Standard microscope sets have 10X eyepieces and a 1.0X auxiliary lens. The resulting working distance (distance from objective lens to focal point) is 80mm and the maximum field diameter (field of view) is 22mm. Auxiliary lenses can be used to increase magnification but the working distance will be decreased. Eyepieces or lenses used to increase magnification will reduce the field of view. The chart below shows the effect of using different power auxiliary lenses and eyepieces together. Use this table to determine the best combination for your purposes.

SPECIFICATIONS

Auxiliary Lens	0.5X		0.75X		1.0X (Standard)		1.5X	
Working Distance	33mm		80mm		80mm		33mm	
Eyepiece	Total Mag.	Field Dia., mm	Total Mag.	Field Dia., mm	Total Mag.	Field Dia., mm	Total Mag.	Field Dia., mm
	5X	2.5X 10X	44 11	3.75X 15X	29.3 7.3	5X 20X	22 8.8	7.5X 30X	14.7 3.7
10X	5X 20X	46 10	7.5X 30X	26.7 8.7	10X 40X	20 5	15X 60X	13.3 3.3
15X	7.5X 30X	36 8.5	11.2X 45X	17.3 4.3	15X 60X	13 3.3	22.5X 90X	8.7 2.2
20X	10X 40X	25 6.5	15X 60X	12.3 4.3	20X 80X	15 3.3	30X 120X	6.7 2.2

Auxiliary Lens

6553J25	AUXILIARY LENS, 0.5X, Ea	80.00
6553J27	AUXILIARY LENS, 0.75X, Ea	90.00
6553J29	AUXILIARY LENS, 1.5X, Ea	90.00

Eyepieces

6553J31	WIDEFIELD EYEPIECE, 5X / 22 mm, Ea	80.00
6553J33	REPLACEMENT EYEPIECE, 10X / 20 mm, Ea	40.00
6553J35	WIDEFIELD EYEPIECE, 15X / 12 mm, Ea	40.00
6553J37	WIDEFIELD EYEPIECE, 20X / 11 mm, Ea	40.00
6553J39	MICROMETER EYEPIECE, 10X, 100 Div in 10 mm	66.00

MOTIC

SMZ SERIES STEREO ZOOM MICROSCOPES

Accessories for SMZ Series Microscopes



6553J41

- A number of accessories for different lighting techniques are available for the SMZ series.

6553J41 Polarizing kit consists of a polarizer and analyzer for simple polarization. 6553J43 darkfield condenser produces a bright image on an almost totally black background for those materials that refract light. 6553J49 gliding stage is actually two plates with a lubricant between them to help control sample movement under the microscope. 6553J51 fluorescent illuminator requires an adapter dependant on which auxiliary lens is being used.

6553J41	POLARIZING KIT	576.00
6553J43	DARKFIELD CONDENSER, with IRIS Diaphragm	95.00
6553J45	PHOTO ADAPTER, for SMZ145, 2X, Ea	90.00
6553J47	CCD ADAPTER, for SMZ145, 0.4X	60.00
6553J49	GLIDING STAGE, for NG5G and K Series Illuminated Stands	80.00
6553J51	FLUORESCENT RING LIGHT	135.00
6553J53	RING LIGHT ADAPTER, for 0.5X Aux Lens	18.00
6553J55	RING LIGHT ADAPTER, for 0.75, 1.0 & 1.5X Aux Lens	15.00
6553J57	BULB, 12V/15W SMZ Incident Illuminator	9.80
6553J59	BULB, 12V/10W SMZ and K Transmitted Illuminator	9.80
6553J61	BULB, 12V/10W SMZ and K Incident Illuminator	9.80

Thomas Tips
Objectives

A lot of information can be found on your objectives:

- The type of objective: achromat, plan achromat, phase, etc.
- The N.A. (Numerical Aperture)
- Tube length: infinity, 160 mm, etc.
- DIN standard
- Cover slip thickness required
- Immersion medium: oil, glycerin, etc; no notation for air immersion

MOTIC

STEREO MICROSCOPES

K 400 Series



6553K05

- Four-step magnification changes from 6X to 50X
- Modular Design
- Resolution to 200 lines/mm

K400 stereo microscopes have a 4 step magnification changer with 0.6X, 1.2X, 2.5X and 5.0X objectives that produce total magnifications of 6X, 12X, 25X and 50X with the Super Widefield eyepieces -10X /23mm FN (see chart for field diameters) - and diopter compensation on both eye tubes. Interpupillary distance adjustment between 54 mm and 76 mm. Standard auxiliary lens is 1.0X.

Stereo microscopes with fixed stop magnification settings are preferred for measuring since the magnifications can be accurately and easily reproduced.

K400P model has a large working surface (300mm wide x 190mm deep) streamlined stand. K400L model has a large working surface (300mm wide x 190mm deep) illuminated stand with built in 12V/10W incident and transmitted light with intensity control. 3-way illumination system allows incident only, transmitted only, or both incident and transmitted light.

K400 SERIES TOTAL MAGNIFICATION/FIELD DIAMETER AT MINIMUM AND MAXIMUM MAGNIFICATION

Auxiliary Lens:	0.3X	0.6X	0.625X	1.8X	1.5X	2.0X	
Working Distance:	236 mm	148 mm	111 mm	89 mm	43 mm	25 mm	
Eyepiece:	Total Magnification/Field Diameter, mm						
0.25X/23FN	min	1.1X/127.8	1.9X/76.7	2.3X/61.3	3.2X/38.3	5.0X/25.6	7.5X/19.2
	max	8.4X/15.3	15.0X/8.2	19.5X/7.4	31.3X/4.6	46.0X/3.1	61.5X/2.3
10X/23FN	min	1.8X/127.8	3.0X/76.7	3.8X/61.3	6.0X/38.3	8.0X/25.6	12.0X/19.2
	max	15.0X/15.3	25.0X/8.2	31.3X/7.4	50.0X/4.6	75.0X/3.1	100.0X/2.3
15X/17.5FN	min	2.7X/97.9	4.5X/50.7	5.8X/46.9	9.0X/29.3	13.5X/19.6	19.0X/14.7
	max	32.5X/11.7	57.0X/7.9	73.0X/5.8	112.5X/3.5	162.5X/2.3	215.0X/1.8
20X/13.4FN	min	3.6X/74.4	6.0X/44.7	7.5X/36.7	12.0X/22.3	18.0X/14.9	24.0X/11.2
	max	30.0X/8.9	50.0X/5.4	62.5X/4.3	100.0X/2.7	150.0X/1.8	200.0X/1.3
31X/10FN	min	5.8X/55.6	9.8X/33.3	12.8X/26.7	19.2X/16.7	28.8X/11.1	38.4X/8.3
	max	48.0X/6.7	80.0X/4.0	100.0X/3.2	160.0X/2.0	240.0X/1.3	320.0X/1.0

*FN=field diameter in mm at the total magnification of the eyepiece.

K500 Series

- Five-step magnification changes from 6.4X to 40X
- Modular Design
- Resolution to 200 lines/mm

K500 stereo microscopes have a 5 step magnification changer at 6.4X, 10X, 16X, 25X and 40X with supplied Super Widefield eyepieces -10X / FN 23 (see chart for field diameters). Diopter compensation on both eye tubes and interpupillary distance adjustment between 54mm and 76mm. Standard auxiliary lens is 1.0X. Stereo microscopes with fixed stop magnification settings are preferred for measuring since the magnification can be accurately and easily reproduced.

K500P model has a large working surface (300mm wide x 190mm deep) streamlined stand.

K500L model has a large working surface (300mm wide x 190mm deep) illuminated stand with built in 12V/10W incident and transmitted light with intensity control. 3-way illumination system allows incident only, transmitted only, or both incident and transmitted light.

K500 SERIES TOTAL MAGNIFICATION/FIELD DIAMETER AT MINIMUM AND MAXIMUM MAGNIFICATION

Auxiliary Lens:	0.3X	0.6X	0.625X	1.8X	1.5X	2.0X	
Working Distance:	236 mm	148 mm	111 mm	89 mm	43 mm	25 mm	
Eyepiece:	Total Magnification/Field Diameter, mm						
0.25X/23FN	min	1.2X/190.8	2.0X/119	2.5X/87.5	4.0X/56.9	6.0X/34.0	8.0X/28.0
	max	7.5X/19.2	12.5X/11.5	15.0X/9.3	25.0X/5.8	37.5X/3.8	50.0X/2.9
10X/23FN	min	1.8X/119.8	3.2X/71.9	4.0X/67.5	6.4X/38.9	9.6X/24.0	12.8X/18.0
	max	12.0X/18.2	20.0X/11.3	25.0X/9.2	40.0X/5.8	60.0X/3.8	80.0X/2.9
15X/17.5FN	min	2.8X/91.7	4.8X/55.0	6.0X/44.5	9.6X/27.5	14.4X/18.3	19.2X/13.8
	max	18.0X/14.7	30.0X/8.8	37.5X/7.0	60.0X/4.4	90.0X/2.9	120.0X/2.2
20X/13.4FN	min	3.6X/68.8	6.4X/41.9	8.0X/35.5	12.8X/20.9	19.2X/14.7	25.6X/10.3
	max	24.0X/11.2	40.0X/6.7	50.0X/5.4	80.0X/3.4	120.0X/2.2	160.0X/1.7
31X/10FN	min	6.1X/52.1	10.2X/31.3	12.8X/25.0	20.0X/15.8	30.7X/10.4	41.0X/7.8
	max	38.4X/8.3	64.0X/5.0	80.0X/4.3	128.0X/2.5	192.0X/1.7	256.0X/1.3

*FN=field diameter in mm at the total magnification of the eyepiece.

6553K05	K400P Stereo Microscope, Streamline Stand	\$1,075.00
6553K10	K400L Stereo Microscope, Illuminated stand	1,195.00

6553K15	K500P Stereo Microscope, Streamline Stand	\$930.00
6553K20	K500L Stereo Microscope, Illuminated stand	1,050.00

MOTIC

STEREO MICROSCOPES

K700 Series

- Zoom range of 1:5.2
- Modular Design
- Resolution to 200 lines/mm

K700 stereo microscopes have a zoom range of 1:5.2 designed on a self-centering dovetail mechanism that is totally parfocal and absolute centered. Supplied with Super Widefield eyepieces -10X / FN 23 (see chart for field diameters) that provide continuous total magnification from 10X to 52X. Diopter compensation on both eye tubes and interpupillary distance adjustment between 54mm and 76mm. Standard auxiliary lens is 1.0X.

K700P model has a large working surface (300mm wide x 190mm deep) streamlined stand.

K700L model has a large working surface (300mm wide x 190mm deep) illuminated stand with built in 12V/10W incident and transmitted light with intensity control. 3-way illumination system allows incident only, transmitted only, or both incident and transmitted light.



6553K25

K700 SERIES TOTAL MAGNIFICATION/FIELD DIAMETER AT MINIMUM AND MAXIMUM MAGNIFICATION

Auxiliary Lens:	0.3X	0.5X	0.825X	1.0X	1.5X	2.0X	
Working Distance:	236 mm	148 mm	111 mm	89 mm	43 mm	26 mm	
Eyepiece:	Mag.	Total Magnification/Field Diameter, mm					
6.25X/ 23FN*	1.0X	1.8X 76.7	3.1X 46.0	3.8X 36.8	6.3X 23.0	8.4X 15.3	12.5X 11.5
	3.1X	5.6X 34.3	9.7X 14.8	12.1X 11.9	19.4X 7.4	29.1X 4.8	38.8X 3.7
18X/ 23FN	1.0X	1.8X 76.7	3.0X 76.7	3.8X 61.3	6.0X 38.3	9.0X 25.6	12.0X 19.2
	3.1X	9.3X 34.7	15.5X 14.8	19.4X 11.9	31.6X 7.4	46.5X 4.9	62.0X 3.7
15X/ 17.5FN	1.0X	2.7X 97.8	4.5X 58.7	5.6X 46.9	9.0X 29.3	13.5X 19.6	18.0X 14.7
	3.1X	14.0X 18.9	23.2X 11.4	29.1X 9.1	46.5X 5.7	69.8X 3.8	93.0X 2.8
24X/ 13.4FN	1.0X	3.0X 74.4	6.0X 44.7	7.5X 38.7	12.0X 22.3	18.0X 14.9	24.0X 11.2
	3.1X	18.5X 14.4	31.0X 8.8	38.8X 6.9	62.0X 4.3	93.0X 2.9	124.0X 2.2
32X/ 10FN	1.0X	3.8X 53.6	6.0X 33.3	12.0X 26.7	19.2X 16.7	28.8X 11.1	38.4X 8.3
	3.1X	29.8X 16.8	49.4X 8.5	62.0X 5.3	90.2X 3.7	148.8X 2.2	198.4X 1.6

*FN=field diameter in mm at the total magnification of the eyepiece

6553K25	K700P Stereo Microscope, Streamline Stand	\$1,275.00
6553K30	K700L Stereo Microscope, Illuminated stand	1,386.00

MOTIC

MICROSCOPES

SMZ and K Series Heads And Focusing Mounts

- Stands and heads sold separately
- Match the head and stand that fits user's need
- Heads include eyepieces
- 45° inclined eyetubes

Modular design of these microscopes allows the user to choose the head, lighting and stand configuration that best suits the user's needs. If a standard model has been chosen, the head from that model may be used with the stands listed here. Likewise the accessories are also usable with these heads. SMZ Series heads are 360° rotatable with these stands, K Series heads are fixed.

SMZ Series - Head and 10X/20 mm Eyepieces Only

6553R06	BINOCULAR HEAD, SMZ140, 1:4 Zoom Range	\$600.00
6553R09	TRINOCULAR HEAD, SMZ143, 1:4 Zoom Range	780.00

SMZ Series - Focusing Mounts (Required)

6553R12	FOCUSING MOUNT, Without Light	\$77.00
6553R15	FOCUSING MOUNT, With Incident Light	192.00

K Series - Head, 10X/23 mm Eyepieces with Focusing Mount

6553R18	K400 HEAD AND MOUNT, Without Light	\$985.00
6553R21	K400 HEAD AND MOUNT, With Incident Light	1,015.00
6553R24	K500 HEAD AND MOUNT, Without Light	\$400.00
6553R27	K500 HEAD AND MOUNT, With Incident Light	630.00
6553R30	K700 HEAD AND MOUNT, Without Light	1,185.00
6553R33	K700 HEAD AND MOUNT, With Incident Light	1,225.00

Universal Stands For SMZ and K Series Heads and Focusing Mounts



6553R35 series

Available with either 238 mm round base or 250 x 250 mm square, off-set base. Pole height: 373 mm from base. Maximum useable height (distance from objective to base): 253 mm. Distance from pole to center of objective lens: 260 mm.

6553R35	UNIVERSAL STAND, Round Base, For SMZ Series	\$246.00
6553R38	UNIVERSAL STAND, Round Base, For K Series	245.00
6553R41	UNIVERSAL STAND, Square Base, For SMZ Series	245.00
6553R44	UNIVERSAL STAND, Square Base, For K Series	245.00

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MOTIC

MICROSCOPES
(continued)

Articulating And Boom Stands



6553R00

Available with either table clamp or 260 mm x 260 mm square off-set base. Pole height: 600 mm from base. Maximum useable height (distance from objective to base): 430 mm at maximum arm length extension, 638 mm at maximum arm elevation. Maximum distance from pole to center of objective lens: 980 mm.

6553R47	ARTICULATING ARM STAND, Table Clamps, For SMZ Series	\$325.00
6553R60	ARTICULATING ARM STAND, Table Clamps, For K Series	\$25.00
6553R63	ARTICULATING ARM STAND, Square Base, For SMZ Series	\$25.00
6553R66	ARTICULATING ARM STAND, Square Base, For K Series	\$25.00

Ball Bearing Boom Stand

Available with either table clamp or 260 mm x 260 mm square off-set base. Pole height: 600 mm from base. Maximum useable height (distance from objective to base): 430 mm. Maximum distance from pole to center of objective lens: 980 mm.

6553R59	BOOM STAND, Table Clamp, For SMZ Series	\$395.00
6553R62	BOOM STAND, Table Clamps, For K Series	\$95.00
6553R65	BOOM STAND, Square Base, For SMZ Series	\$95.00
6553R68	BOOM STAND, Square Base, For K Series	\$95.00

LEICA

BM E BRIGHTFIELD COMPOUND MICROSCOPE



6554A01

- Superior performance
- Durable construction
- All glass, high quality coated optics
- Anti-fungus/mold warranty

The Leica BM E microscope has been designed with exacting attention to every component, creating a streamlined, high performance instrument unique in its class, the ultimate in comfort and quality at a reasonable price. The compact size keeps key controls within easy reach. Monocular or binocular bodies are inclined 45° for comfort and rotate 360° for easy sharing. Binocular body features dual focusing eye tubes with 54 to 74 mm interpupillary adjustment. Precision machined nosepiece for excellent parfocality and parcenteration. Superior quality Leica E Series all-glass, finite corrected optics provide brilliant, high-contrast images. For even better results, upgrade to E, eyepieces and objectives. Mechanical stage includes 1.25 N.A. Abbe condenser with built-in blue filter. A 12W Tungsten-Halogen light source provides 2000 hours of stable, balanced light. Designed to meet international safety standards. Supplied with dust cover, instruction manual, rubber eye guards and immersion oil.

6554A01	MONOCULAR MICROSCOPE, 4X, 10X, 40X Objectives, 120 V	\$635.00
6554A04	MONOCULAR MICROSCOPE, 4X, 10X, 40X Objectives, 230 V	\$35.00
6554A07	BINOCULAR MICROSCOPE, 4X, 10X, 40X, 100X (Oil), 120 V	\$940.00
6554A10	BINOCULAR MICROSCOPE, 4X, 10X, 40X, 100X (Oil), 230 V	\$940.00
6554A12	BULB, Tungsten-Halogen, 12 W, Each	8.00
6554A16	CARRYING CASE, Hardwood Lock	100.00
6562V06	CARRYING CASE, Soft	98.00
6554A22	IMMERSION OIL	9.00

Thomas Tips
Immersion Oil

Almost all immersion oil is made to DIN (Deutsches Institut für Normung e.V.) Standard 58 884 with Refractive Index at 23°C, D Line = 1.515.

They differ mainly in viscosity (from 150 to 46,000 centistokes) and Fluorescence properties. Cargille Type 37 (6705C73, C75) is formulated to meet DIN standards at 37°C for use when stage temperatures are elevated by sub stage illuminators or high wattage projection equipment. High viscosity oils are useful for long working distance immersion objectives where they can bridge gaps up to 4.4 mm.

LEICA

CM E COMPOUND MICROSCOPES

- Superior image quality
- Durable construction
- Compact design

Complete microscope models are available with binocular and trinocular viewing bodies. Leica E₁ optics are standard for improved image flatness and color. The durable cast aluminum stand minimizes vibration and provides fatigue-free, stable operation. Self-adjusting, maintenance-free focus mechanism prevents stage drift. An angled lamp door prevents accidental breakage. The graduated mechanical stage with vernier scales provides precise sample control. Optional accessories allow a wide range of illumination techniques. Supplied with USA cord. If other country cord is required, please specify at time of order. Supplied with 4X, 10X, 40X and 100X (oil) objectives. See Objective listings that follow for numerical apertures. Dimensions (W x D x H, inches): 8.58 x 10.5 x 15; weight (with binocular body): 14.2 lbs.



6554001

6554K01	BINOCULAR MICROSCOPE, Achromatic, 110V	\$1,039.00
6554K03	BINOCULAR MICROSCOPE, Plan Achromatic, 110V	1,449.00
6554K05	BINOCULAR MICROSCOPE, Phase Contrast, 110V	1,696.00
6554K07	TRINOCULAR MICROSCOPE, Achromatic, 110V	1,391.00

CM E Microscopes may also be custom built by following the steps below:

Step 1. Choose a stand

Stands include dust cover, instruction manual, installed lamp, Allen wrench, blue filter, Abbe slider condenser and graduated right hand mechanical stage.

6554L01	STAND, 120 V/20 W, Each	\$95.00
6554L04	STAND, 230 V/50 W, Each	95.00

Step 2. Choose a power cord for your area

Call for other available locale power cords.

6554L08	USA POWER CORD	\$5.00
6554L12	EUROPEAN CONTINENTAL POWER CORD	40.00
6554L16	ARGENTINA POWER CORD	24.00

Step 3. Choose a viewing body

6554M01	MONOCULAR BODY, 1 Eyepiece Required	\$33.00
6554M04	TEACHING BODY, 2 Eyepieces Required	125.00
6554M07	BINOCULAR BODY, 2 Eyepieces Required	299.00
6554M10	TRINOCULAR BODY, 2 Eyepieces Required*	500.00

*Plus one 6554M53 for photography

Step 4. Choose eyepieces

6554M50	13X, E ₁ Eyepiece With Pointer, 18 mm Field of View	\$50.00
6554M52	13X, E ₁ Eyepiece, 18 mm Field of View	42.00
6554M56	15X, E ₁ Eyepiece, 15 mm Field of View	75.00
6554M58	5X, E ₁ Eyepiece, 37.5 mm Field of View	50.00

Step 5. Choose objectives

E₁ eyepieces must be used with E₁ objectives. You may choose any of the objectives listed below. Up to four at a time will fit the nosepiece of your microscope. A phase contrast objective may also be used for brightfield work.

6554M62	4X/0.10 N.A., E ₁ Achromatic Objective	\$40.00
6554M65	10X/0.25 N.A., E ₁ Achromatic Objective	50.00
6554M68	40X/0.60 N.A., E ₁ Achromatic Objective	75.00
6554M71	100X/1.25 N.A.(Oil), E ₁ Achromatic Objective	117.00
6554M74	4X/0.10 N.A., E ₁ Plan Achromatic Objective	75.00
6554M77	10X/0.25 N.A., E ₁ Plan Achromatic Objective	100.00
6554M80	40X/0.65 N.A., E ₁ Plan Achromatic Objective	157.00
6554M83	100X/1.25 N.A.(Oil), E ₁ Plan Achromatic Objective	292.00
6554M86	10X/0.25 N.A., E ₁ Plan Phase Achromatic Objective	199.00
6554M89	20X/0.40 N.A., E ₁ Plan Phase Achromatic Objective	208.00
6554M92	40X/0.60 N.A., E ₁ Plan Phase Achromatic Objective	275.00
6554M95	100X/1.25 N.A.(Oil), E ₁ Plan Phase Achromatic Objective	323.00

Step 6. Phase Contrast Sliders

If you chose any phase contrast objective, you must choose a corresponding phase contrast slider or, if you chose more than one, a phase contrast slider kit. The Slider Kit contains four annular rings, one each - 10X, 20X, 40X and 100X, plus a slider.

6554N01	10X PHASE CONTRAST SLIDER	\$30.00
6554N04	20X PHASE CONTRAST SLIDER	30.00
6554N07	40X PHASE CONTRAST SLIDER	30.00
6554N10	100X PHASE CONTRAST/DARKFIELD SLIDER	30.00
6554N13	PHASE CONTRAST SLIDER KIT	55.00

Step 7. Additional Accessories

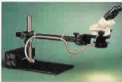
A green filter is recommended for phase contrast work, a blue critical illumination filter for photography is included with the microscope. The phase telescope is necessary for aligning annular rings. Order immersion oil (6554A22) if you choose a 100X (oil) objective. Storage or carrying cases are listed with the BM E microscope.

6554N50	PHASE TELESCOPE (For Centering Annular Rings)	\$85.00
6554N53	POLARIZING/ANALYZER KIT, For Simple Polarization	200.00
6554N56	KOHLER KIT	\$30.00
6554N59	ABBE SLIDER CONDENSER, Replacement	50.00
6554N62	BLUE FILTER, For Critical (Standard) Illumination	6.00
6554N65	GREEN FILTER, For Critical (Standard) Illumination	6.00
6554N68	BLUE FILTER, For Kohler Illumination	6.00
6554N71	GREEN FILTER, For Kohler Illumination	6.00
6554N74	TUNGSTEN HALOGEN LAMP, 30 W	8.00

WESTOVER SCIENTIFIC

INSPECTION STATIONS

A variety of configurations for every QC need



6562L92

- Complete packages - nothing more to buy
- Binocular microscope body
- Total magnification: 7-45X
- Four stand and illumination combinations



6562L94

Microscope has rotatable 0.7X - 4.5X head, with 10X eyepieces. Control knobs mounted on both sides for ergonomic efficiency. Interpupillary and diopter adjustment allows for custom adjustment to each user.

Model 6562L94 has microscope mounted on an industrial boom stand. This stand has a heavy, top-plate base plate, sturdy vertical support rod, rack and pinion focusing mechanism with safety stop and a 20" horizontal reach from the pole. Illumination is provided by a 150 watt halogen fiber optic light source which mounts on rear of stand. Light source has variable light control and a two speed fan. Light source uses a ring lamp light guide, a 360° annular fiber optic ring lamp with 36" long flexible metal gooseneck. Dimensions: 10" x 26" x 14".

Model 6562L94 has microscope mounted on an industrial inspection stand. This stand has a low profile, large size metal base plate, sturdy vertical support rod, rack and pinion focusing mechanism with safety stop and a bolt-on stage plate. Illumination is provided by a fluorescent ring lamp with circular fluorescent light. Lamp has a high color temperature and a low heat output. Dimensions: 10" x 16" x 14".

Model 6562L96 has microscope mounted on the industrial inspection stand. Illumination is provided by the fiber optic light source. Light source uses a bifurcated light guide with two 23" long flexible metal goosenecks. Dimensions: 10" x 16" x 14".

Model 6562L98 has microscope mounted on the industrial inspection stand. Illumination is provided by the fiber optic light source and a transmitted light base. Light source uses the bifurcated light guide and the light base has 20 watt variable halogen illumination via an adjustable mirror. Dimensions: 10" x 16" x 14".

6562L92	INSPECTION STATION, Boom Stand, Ring Lamp	\$1,834.00
6562L94	INSPECTION STATION, Inspection Stand, Fluor. Ring Lamp	1,535.00
6562L96	INSPECTION STATION, Inspection Stand, Bifurcated Guide	1,644.00
6562L98	INSPECTION STATION, Inspection Stand, Trans. Light Base	2,119.00



MICROSCOPES

Wide field stereo zoom microscopes



6562M01

- 10x wide field eyepieces
- Side-mounted controls
- Cast metal body

Precision optics produce high-resolution, 3-D images. Optional eyepiece and supplementary lenses are available to customize any model for specific magnification requirements. Binocular or trinocular viewing head with a 45° inclination and a 360° rotatable head. A large field of view and a 90 mm long working distance allow for full coverage of your study. Coaxial, rack and pinion focusing controls, tension control mechanism to prevent drifting, slip-clutch mechanism to protect the gears and a 55 mm vertical travel complete this system. External Light source is required.



6562M05

Pole Stand base is a stable 190 x 150 mm, fitted with anti-skid feet. The vertical arm is 165 mm in length and allows 100 mm vertical travel. Dimensions: 190 mm x 150 mm x 430 mm, 5.6 kg.

Boom Stand is suited for applications requiring wide horizontal and vertical viewing latitude. The boom stand is exceptionally stable, so no counterbalance is required. Base is 260 x 240 mm, 5.9 kg with anti-skid feet. Stainless steel base pole is 390 mm in length allowing 300 mm vertical travel. The horizontal arm is 500 mm in length with 415 mm horizontal travel. Vertical arm head is 145 mm in length with 70 mm vertical travel. Dimensions: 815 mm(L) x 240 mm(W) x 420 mm(H), 11.2 kg.

6562M01	MICROSCOPE BINOCULAR W/POLE STAND	\$750.00
6562M03	MICROSCOPE TRINOCULAR W/POLE STAND	820.00
6562M05	MICROSCOPE BINOCULAR W/BOOM STAND	940.00
6562M07	MICROSCOPE TRINOCULAR W/BOOM STAND	989.00

Thomas Scientific

LEICA

ZOOM 2000™ MICROSCOPES

Self-contained, one piece design for rugged use

- Zoom ranges: 7-45X
- Three-way illumination system
- Working Distance: 100 mm
- Especially suitable for classroom use



6562U04

High quality glass optical system is completely encased in the microscope body to resist dust and dirt damage and to prevent tampering and lost parts. Illumination can be switched between transmitted light, reflected light or both, and system is designed to keep stage temperature cool. Infinitely variable zoom control system can change viewing perspective with the turn of zoom control knob. Tamper-proof, interlocked, inclined eyepiece tubes allow adjustment for interpupillary distances from two to three inches. Eyepieces are permanently attached to the eyetubes. Glass stage plate is sealed to prevent spills and splashes from damaging internal components. UL listed. Height: 332 mm; weight: 12 lbs. (5.5 kg).

Specifications:	6562U04, U07	6562U09, U10
Zoom Range:	10.5X - 45X	7X - 30X
Field Of View:	20 - 4.7 mm	26 - 6 mm
Working Distance:	100 mm	
Stage (Overall):	175 x 186 mm	

6562U04	MICROSCOPE, 10.5X - 45X, 120 V	899.00
6562U07	MICROSCOPE, 10.5X - 45X, 230 V	900.00
6562U09	MICROSCOPE, 7X - 30X, 120 V	999.00
6562U10	MICROSCOPE, 7X - 30X, 230 V	999.00
6562U06	LAMP, Reflected Light, 6 1/2 15 Watts	25.00
6562U05	LAMP, Transmitted Light, T15 1/2, 15 Watts	6.00
6562V02	LAMP, Transmitted Light, 230 V, 15 Watts	6.00
6562V05	DUST COVER	7.00
6562V08	CARRY CASE	96.00

PHYSITEMP

THERMAL MICROSCOPE STAGE

Holds specimen at any temperature from -20° to 100°C

6562V12

- Control to within 0.1°C
- Digital display of set-up and operating temperature
- Fits most microscopes
- No moving parts
- Requires no CO₂ or nitrogen for cooling

A Thermoelectric device that only requires AC current and a trickle of running water for operation. Units consist of a stage, a controller and an optional pump unit. Stage is thin nickel coated copper plate with a thermoelectric module mounted on one side. Sensors mounted in the stage provide temperature monitoring for control purposes and safety. Thermometer circuitry of this unit can also be used as an independent instrument, either with the microprobe supplied or with any type T thermocouple sensor.

6562V12	THERMOELECTRIC MICROSCOPE STAGE -20° TO 80°C	\$3,879.00
6562V15	THERMOELECTRIC MICROSCOPE STAGE -20° TO 110°C	3,589.00
6562V18	SMALL PETRI DISH STAGE -15° TO 60°/95° C	1,024.00
6562V21	LARGE PETRI DISH STAGE -5° TO 80°C	1,309.00
6562V24	DISH/STAGE -5° TO 80°C, 18X/0.9	4,209.00
6562V27	LARGE/STAGE -15° TO 60°C, LEICA	4,383.00

DRUMMOND

NANOJECT II AUTO-NANOLITER INJECTOR

Automated microprocessor-controlled micro injection pipet



6563A01



6563A16

- Remote control and non-rotating plunger eliminates vibration
- Selectable injection volumes: 2.3 to 69 nanoliters in 16 increments

Specifically designed to perform ultra-delicate nanoliter injection procedures into cells. Supplied with sufficient N-51-A glass capillaries for preparing 400 injection tips and can be mounted on most micro manipulators. Comes complete with 200 borosilicate capillaries that can be pulled to the required tolerance together with a back filling needle and maintenance kit.

SPECIFICATIONS

Selectable Operating Speeds (nl. per sec.):	Fast	Slow
Fill Speed:	46	23
Injection Speed:	46	23
Empty Speed:	230	92

6563A01	NANOJECT II, Variable Volume, 110V	\$1,178.55
6563A04	GLASS CAPILLARY, 3.5', Pk. 100	12.00
6563A07	GLASS CAPILLARY, 7', Pk. 100	35.00
6563A10	GLASS CAPILLARY, 90 mm, Pk. 100	15.00
6563A13	UNIVERSAL ADAPTER	107.15
6563A16	MAGNETIC BASE	144.65
6563A19	SUPPORT BASE	107.15

KENT SCIENTIFIC

ULTRA MICRO PUMP II



6563B04

Can dispense as little as 26 picoliters per incremental advance of the syringe piston (using a 0.5µl syringe). Fluids injected or withdrawn are held entirely within the micro syringe to maintain a low fluid dead volume. May be attached to any micropositioner, allowing excellent mechanical resolution and positional control of the delivery pipette tip.

The microprocessor-based Micro4 is an integral component in the UMP2 system and provides an "intelligent" and easy-to-use interface for up to four syringe pumps. From the keypad, the user can set volume and rate of infusion/withdrawal, syringe type and synchronize pumps start/stop. Parameters are stored in the "non-volatile" memory for instant recall. Optional footswitch for "hands-free" start/stop. An RS-232 port can be used with computer control programs.

The Ultra Micro Pump II accepts glass syringes with barrel diameters from 5.5 to 9 mm.

SPECIFICATIONS (based on 1 µl syringe)

Total Number of Steps	20,000 (83 mm travel)
Dispensing Volume	0.052 nl/step
Linear Motion per Step	3.175 microns
Weight	325 g
Mounting Rod Diameters	6.4 mm (0.33 in.)
Controller Power	2 amps, 12 V DC
Dimensions	32 mm x 32 mm x 160 mm

6563B04	ULTRA MICRO PUMP II (ONE) And Micro4 Controller	\$3,074.00
6563B07	ULTRA MICRO PUMP II (TWO) And Micro4 Controller	5,007.00
6563B10	ULTRA MICRO PUMP II (THREE) And Micro4 Controller	7,948.00
6563B13	ULTRA MICRO PUMP II (FOUR) And Micro4 Controller	9,089.00
6563B16	ULTRA MICRO PUMP II, Without Controller	2,304.00
6563B19	MICRO4 CONTROLLER, 4 Channel	1,340.00
6563B21	FOOT SWITCH For Micro4	116.00
6563B25	RS-232 CABLE, 9 Pin, 17'	78.00

VIDEO EYEPIECE*High resolution, full-color video microscopy*

6564A01

- Simplest setup, lowest cost
- Easy to use
- Professional features

The ideal tool for applications involving extended periods of looking through the eyepieces of a microscope - allows the user to view specimen on a video monitor for easier long-term work. Operation consists of inserting the video eyepiece into a 23 mm or 30.5 mm ocular on the microscope, plugging in the RCA cable to a monitor or VCR and plugging the AC adapter into an outlet. After the white balance button is pressed for a few seconds, the video eyepiece is ready to go. Electronic, push-button white balance; automatic gain control; 525 line/60 Hz scanning system; built-in 0.4X reduction lens ensuring that the field of view remains the same for both the microscope and the video monitor; 48dB S/N ratio. 1/3" CCD sensor provides picture elements of 620(H) x 580(V). Horizontal resolution is 420 TV lines. Minimum illumination required: 5 lux.

6564A01	VIDEO EYEPIECE KIT	\$440.00
6564A04	VIDEO KIT, Comp Trinocular Adapter	470.00
6564A07	VIDEO KIT, Zoom Trinocular Adapter	470.00

PHOTOMICROGRAPHIC INSTANT CAMERA KIT

6565C15

- Fits into most standard eyepiece tubes
- Constructed of impact-resistant plastic
- Designed for easy film loading
- Equipped with shutter and release cable

Uses standard, self-developing Polaroid® Land film pack for immediate production of black-and-white or color prints at the microscope. Photo quality is adequate for many medico-biological and industrial applications. Low price and simplicity of design make camera suitable for student use.

Mounting adapter, 34 mm i.d., with light-tight washer, has three centering screws for clamping onto microscope eyepiece tube. Two-piece, threaded adapter is adjustable to accommodate various eyepieces. Socket in lower end of camera and focusing tube simply slides onto positioned adapter, which can be left in place. Extra adapters are offered separately to simplify transferring camera from one microscope to another.

Kit includes camera, mounting adapter, focusing tube and instruction manual. Film (not supplied with kit) is 3 1/4" x 4 1/2". Film is sold in 8-frame packs of Polaroid Type 107 (black-and-white) or Polaroid Type 108 (color).

NOTE: kit does not fit most stereo-type eyepieces and may not fit photo tube on trinocular microscopes. Adapters are available from microscope manufacturers to reduce stereo-type eyepiece or large phototube down to standard eyepiece size allowing unit to fit.

6565C15	CAMERA KIT, Model MF-90	\$325.00
6565C25	MOUNTING ADAPTER	50.00



Thomas Tips

Matching Camera to Microscope

Attaching a camera to your microscope has always required a couple of extra parts such as eyepiece adapters or "T" mounts to make the connection between the microscope "C" mount and the camera lens mount. With the recent advancements in digital camera development, the connection has become more difficult. New cameras (with new mount configurations) are being introduced at a rapid rate. Sometimes they get ahead of our adapter supplier and no adapters are available yet. Thomas has all the adapters needed to combine the microscopes and cameras we sell, but it is probably a good idea to check with us for adapter availability before buying a camera from another source.

KEN-A-VISION

VIDEO FLEX® MICROSCOPE CAMERA

Transmits images via the internet



6565C35

- Digital/analog image capturing
- 50X zoom
- Connects to the USB port on a PC, MAC or Laptop
- Ideal for medical research or training

Transmit high-resolution images from your microscope to a monitor and television screen, simultaneously. Made of polycarbonate, it is sturdy and durable for rugged conditions and environments. Use the included adapter to connect the Video Flex to your microscope. 12' AV cable, contrast control buttons, positive/negative switch, fluorescent control switch and ¼ turn "quick focus" are additional features that add to the ease-of-use and versatility of the video camera. The Flex Arm Camera is recommended for use with a binocular microscope and the Cort Connect Camera is recommended for use with a trinocular mount. Package includes cable and software for connecting to computer. Dimensions: 7" x 7" x 7" base, 30" height.

SPECIFICATIONS

Weight:	5.05 lbs
Lens:	8 mm
Light Sensor:	1.5 Lux
Resolution:	500 Lines
Magnification:	50:1 and greater
Output Signal:	USB Composite and S-VHS

6565C30	MICROSCOPE CAMERA, Model 7900 Flex Arm	\$1,295.00
6565C35	MICROSCOPE CAMERA, Model 7900 Cord Connect	1,295.00



35 MM PHOTO PACKAGES

For Thomas Microscopes



6565C75



6565C81

- Lens and T-Adapter in one package
- Available for compound or stereo zoom microscopes

35 mm system consists of a professional 35 mm camera back, T-Mount and microscope lens for either Thomas trinocular compound or stereo zoom microscopes. Lens kits contain T-mount and lens to allow you to use your own 35 mm camera.

For Compound Microscopes

6565C75	35 MM CAMERA SYSTEM	\$356.15
6565C87	LENS KIT, for Canon	245.00
6565C90	LENS KIT, for Canon EOS	245.00
6565C93	LENS KIT, for Maxium	245.00
6565C96	LENS KIT, for Minolta	245.00
6565C99	LENS KIT, for Nikon	245.00
6565B02	LENS KIT, for Olympus	245.00
6565B05	LENS KIT, for Pentax	245.00
6565B08	LENS KIT, for Pentax K	245.00

For Stereo Zoom Microscopes

6565C01	35 MM CAMERA SYSTEM	\$356.15
6565B09	LENS KIT, for Canon	245.00
6565B11	LENS KIT, for Canon EOS	245.00
6565B13	LENS KIT, for Maxium	245.00
6565B15	LENS KIT, for Minolta	245.00
6565B17	LENS KIT, for Nikon	245.00
6565B19	LENS KIT, for Olympus	245.00
6565B21	LENS KIT, for Pentax	245.00
6565B23	LENS KIT, for Pentax K	245.00

EYEPIECE MICROMETERS

For Thomas Brand Compound Microscopes

Consists of a 10X eyepiece with reticle installed. 6585E01 has a 10 mm scale with 100 divisions of 0.1 mm. 6585E04 has a 0.500 inch scale with 100 divisions of 0.005". 6585E07 has a photo framing reticle which shows the area of the slide being photographed. 6585E10 has an etched pointer on the reticle, not a wire pointer.



6585E01

6585E01	EYEPIECE, 10x, With Reticle, 10 mm in 1 mm	\$106.00
6585E04	EYEPIECE, 10x, With Reticle, 0.500" in 100"	106.00
6585E07	EYEPIECE, 10x, With Framing Reticle	106.00
6585E10	EYEPIECE, 10x, With Pointer Reticle	106.00

EYEPIECE AND STAGE MICROMETERS

High precision for your measurement needs



6585E35

6585E40

6585E55



6585E65

6585E75

- Eyepiece micrometers are 20 mm diameter for universal fit

THOMAS NO.	DESCRIPTION	PRICE
MICROMETER DISCS		
6585E30	Linear Scale to Read 0.001 inch	\$26.00
6585E35	Linear Scale to 10 mm in 0.1 mm with Every Tenth Line Numbered	23.00
6585E40	Ruled 10 mm Square in 0.5 mm Divisions with Every Other Line Numbered	23.00
6585E45	Centered Crosshair	23.00
6585E50	Whipple Disc is in 7.0 mm Squares	23.00
6585E55	Swift Disc is 100 mm Square in 1 mm Squares	23.00
STAGE MICROMETERS		
6585E65	Linear Scale to 1 mm in 0.01 mm.	\$50.00
6585E75	Decimal Scale 40 X 0.001" Increments	50.00

EYEPIECE MICROMETERS

- Glass discs, with linear ruling or grid indelibly inscribed; divisions numbered as indicated
- Fit over diaphragm in eyepiece

NOTE: unless using precalibrated types under specified conditions, must calibrate discs by means of a stage micrometer to establish value of graduation interval for each combination of eyepiece, tube length, and objective magnification.

Whipple Eyepiece Crossline Disc

- Design approved by Melville C. Whipple, Harvard University, Engineering School, Department of Sanitary Chemistry
- Diameter, 21 mm

Used in water supply testing, in blood test for lead poisoning and in numerous techniques for counting bacteria, plankton, dust, etc.; see American Public Health Association, *Standard Methods for the Examination of Water and Wastewater*, 15th Ed. (1980), Method 1002E. Large square divided into 100 small squares, one of which is further subdivided into 25 smaller squares with vertical and horizontal lines extending full width of large square. Can be used in Leica and Reichert-Jung Huygenian and Leica wide-field, eyepieces; does not fit Reichert-Jung wide-field eyepieces.



6585H10

6585H10	CROSSLINE DISC, Whipple	\$157.00
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Howard Eyepiece Micrometer Disc

- Diameter, 21 mm

For use with 3298N10 Howard Mold Counting Chamber in estimating length of mold filaments. See A.O.A.C., Vol. 6, No. 1 (1922), p. 50. Usable in Bausch & Lomb and Reichert-Jung Huygenian and B&L wide-field, eyepieces; does not fit Reichert-Jung wide-field eyepieces.



6585H20

6585H20	MICROMETER DISC, Howard	\$132.35
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Competitive Prices



You'll find our prices are competitive whether you're purchasing one item or thousands. Be sure to check with Thomas whenever you need pricing for a large multi-item order or an order for a single item. We also invite you to let us quote on your annual purchasing requirements as your prime supplier of laboratory products.

BEL-ART

VIKEM® VINYL MICROSCOPE COVER

Protects microscopes from dust or spills



- Universal fit
- Economical
- Transparent

Cover fits most standard compound and zoom microscopes. Vikem vinyl is impervious to most common lab substances. Dimensions: 7" square bottom x 7" square top x 16" high (18 x 18 x 41 cm).

6585J01

6585J01 MICROSCOPE COVER, Vinyl\$13.05

DOLAN-JENNER

MICROSCOPE ILLUMINATORS

Fiber-lite® 3100 Illuminator



6625820

- Lightweight
- 10, 000 foot candle intensity
- Lifetime manufacturer's warranty

The 30 watt quartz-halogen lamp produces intense, cold illumination. A solid state intensity control has 4 intensity settings for precise light level. Lamp life is 200 hours at full intensity. Color temperature: 3100°K. Light guide required.

6625820	FIBER-LITE 3100, 115 V	\$219.00
6625823	SINGLE LIGHT GUIDE, 23" Requires 6625832	77.00
6625826	LENS, 38 mm Focal Length	30.00
6625829	RING LIGHT, 36" Cable, Requires 6625832	255.00
6625832	ADAPTER, For 6625823 and 839	17.00
6625835	LAMP Replacement, 30 Watt	35.00

DOLAN-JENNER

MICROSCOPE ILLUMINATORS

Fiber-Lite® MI-150 Illuminator



6625838

- Lightweight, compact unit
- UL, CE and C-UL approved
- Lifetime manufacturer's warranty
- Requires no adapters

This 150 Watt illuminator delivers 350,000 foot candles of high intensity cold light illumination with a lamp life of over 1000 hours. Audible noise and vibration is minimal and a convenient side door makes changing lamps fast

and easy. Solid state 0 to 100% intensity control provides full variation in brightness. Lamp EKE, 21 V, 150 Watt, 3250°K. Dimensions (L x W x H, inches): 6.0 x 8.5 x 5.3. Weight: 7.75 lbs. Light guide required.

6625838	FIBER-LITE MI-150, 115 V	\$295.00
6625841	FIBER-LITE MI-150, 230 V, European Plug	295.00
6625844	SINGLE LIGHT GUIDE, 20"	143.00
6625847	DUAL LIGHT GUIDE, 23"	182.00
6625850	RING LIGHT, 36" Cable	295.00
6625853	LAMP Replacement, 150 Watt	25.00

DYNALUME® STEREO-TECH

Microscope Illuminator System



6625C01

- Quartz halogen lamps in spot, combination or flood beam patterns
- Stepless electronic intensity control
- Safe, low voltage plug-in

The Dynalume Stereo-Tech systems are designed to provide high output intensity levels for stereo microscopes. The unique mounting method uses an adjustable compression device for instant attachment to all microscope pod support rings. The complete dual head illumination assembly mounts instantly in the

"nicholas" bore. All units also incorporate chrome flex-arms, ventilated aluminum lamp guards and low voltage power supplies.

6625C01 has Tungsten/Quartz Halogen (TCH) Comb. Beam bulbs; 6, 000 Ft Candle intensity; 10, 000 hour average life 3, 000°K.
6625C03 has Tungsten/Argon (TA) Spot Beam bulbs; 6, 400 ft Candle intensity; 2, 500 hour average life 2, 850°K.

6625C01	STEREO-TECH MICRO ILLUMINATOR	\$249.00
6625C03	STEREO-TECH MINI ILLUMINATOR	209.00

LEICA

MICROSCOPE LAMPS

Nicholas Microscope Lamps

- Designed for stereo-microscope examination of both surface and recessed details
- High intensity beam effectively illuminates crevices, deep holes, etc.

Lamp is suitable for examination of opaque or transparent specimens under all magnifications. Transformer has a 3-step switch to provide choice of light intensity. Ventilated plastic housing contains fixed-focus condenser and 6.5-volt lamp bulb with prefocused double-contact base. Friction ring clamp on extendible, three-link arm attached to transformer. Arm is directly attachable to threaded sockets on Power Pod body. Lamp without arm can be inserted directly in port on microscope arm or in transillumination base. With 3-wire cord and plug for 120 volts, 50 or 60 Hz, 35 watts.



6630F06

6630F06	MICROSCOPE LAMP, Nicholas	\$207.00
6630F10	LAMP BULB, 6.5 V, 2.75 A	20.44
6630F12	LAMP BULB, 6.5 V, 2.75 A, PK.5	92.00

General Purpose Microscope Lamp

- Particularly valuable for stereomicroscopy

Wide aperture lens system, with heat-reflecting coating, projects intense spot of light in small field or brilliantly illuminates larger fields seen at lower powers. Three-link arm attaches lamp directly to socket in Power Pod body of Leica StereoZoom Microscopes. Ventilated housing includes 6.0-volt halogen-cycle lamp. Transformer and 3-step intensity control switch are mounted on detachable base. With 3-wire cord and plug for 120 volts, 50 or 60 Hz; UL listed.



6630H09

6630H09	MICROSCOPE LAMP	\$514.00
6630H22	LAMP BULB, 20 W	23.33
6630H24	LAMP BULB, 20 W, PK. 10	210.00

FIBER OPTIC LIGHT SOURCES

High Power



6640C12

- Powerful, 150 watt variable intensity
- Quiet, low vibration light source
- Long life (200 hour) 3250K lamp

Flexible single or dual light guides (sold separately) provide light where it is needed. Allow angling light for shadowing or to highlight specimen as necessary. Optional focusing lens focuses light at the specimen plane. 3400K lamp with 40 hour life available. Dimensions: 4½ x 6½ x 7". Light guide not included but required for use. Power requirements: 110/120 V, 50/60 Hz (220/230 V model is available on special order).

6640C02	LIGHT SOURCE, 150 Watt	\$375.00
6640C04	LIGHT GUIDE, Single, 18"	145.00
6640C10	LIGHT GUIDE, Dual, 18"	365.00
6640C12	FOCUSING LENS	60.00
6640C13	LAMP, 150 W, 3400K Color	35.00
6640C15	LAMP, 150 W, 3250K Color	35.00

Economy Model

- Shock resistant, 20 watt, halogen lamp
- Quiet, low vibration light source

Lamp is 2000 hour, 3100K color. 6640C12 focusing lenses may be used with the light guides listed below. Light guide not included but required for use. 220/230 V model is available on special order.

6640C16	LIGHT SOURCE, 20 Watt	\$135.00
6640C18	LIGHT GUIDE, Dual, 18"	252.00
6640C19	LIGHT GUIDE, Single, 18"	145.00
6640C54	LAMP Replacement	25.00



RED LABEL® COVER GLASSES

Quality and economy



6661B40 series

- Cut from colorless micro sheet which is of the highest resistance to attack by moisture; free from lead oxide; remarkably free from brittleness and very flat
- Precision controlled thickness is obtained
- Conform to Interim Federal Specification NNN-C-001434A
- Relative absence of brittleness greatly reduces breakage in handling and cleaning, particularly of large rectangles
- Practically noncorrodible, corrosion under conditions other than tropical is highly improbable

Thickness of Red Label Cover Glasses is controlled within the following tolerances:

- No. 0 - 0.085 to 0.13 mm thick
- No. 1 - 0.13 to 0.16 mm thick
- No. 1½ - 0.16 to 0.19 mm thick
- No. 2 - 0.19 to 0.23 mm thick

Sizes in widest use are packed in a hinged-lid plastic box with die-cut foam plastic support liner. Cover glasses can be withdrawn singly without touching the surface. Remaining sizes are packed in small cardboard boxes. Ten 1 oz. boxes are packed in a convenient carton.

Squares, No. 0, Red Label

- Especially suitable for use in supravital staining and other techniques which require a high power microscope objective of wide numerical aperture and short working distance
- Case contains ten 1 oz. boxes

6661B40	COVER GLASS, 18 mm, 1 oz. Bk.	\$25.20
6661B43	COVER GLASS, 18 mm, 10 oz. Cs.	252.00
6661B52	COVER GLASS, 22 mm, 1 oz. Bk.	23.25
6661B55	COVER GLASS, 22 mm, 10 oz. Cs.	232.50

Squares, No. 1, Red Label

- Thickness 0.13 to 0.16 mm
- Case contains ten 1 oz. boxes

6661F40	COVER GLASS, 18 mm, 1 oz. Bk.	\$14.25
6661F43	COVER GLASS, 18 mm, 10 oz. Cs.	142.50
6661F52	COVER GLASS, 22 mm, 1 oz. Bk.	13.80
6661F55	COVER GLASS, 22 mm, 10 oz. Cs.	138.00
6661F64	COVER GLASS, 25 mm, 1 oz. Bk.	14.30
6661F67	COVER GLASS, 25 mm, 10 oz. Cs.	143.00

Squares, No. 1½, Red Label

- For critical work, particularly with high power objectives which are usually corrected for a cover glass thickness of either 0.17 or 0.18 mm
- Case contains ten 1 oz. boxes

6661K40	COVER GLASS, 18 mm, 1 oz. Bk.	\$14.25
6661K43	COVER GLASS, 18 mm, 10 oz. Cs.	142.50
6661K52	COVER GLASS, 22 mm, 1 oz. Bk.	13.80
6661K55	COVER GLASS, 22 mm, 10 oz. Cs.	138.00
6661K64	COVER GLASS, 25 mm, 1 oz. Bk.	13.90
6661K67	COVER GLASS, 25 mm, 10 oz. Cs.	139.00

Squares, No. 2, Red Label

- Case contains ten 1 oz. boxes

6661O40	COVER GLASS, 18 mm, 1 oz. Bk.	\$12.80
6661O43	COVER GLASS, 18 mm, 10 oz. Cs.	128.00
6661O52	COVER GLASS, 22 mm, 1 oz. Bk.	12.20
6661O55	COVER GLASS, 22 mm, 10 oz. Cs.	122.00
6661O64	COVER GLASS, 25 mm, 1 oz. Bk.	14.30
6661O67	COVER GLASS, 25 mm, 10 oz. Cs.	143.00

Circles, No. 1, Red Label



6662F43

- Thickness 0.13 to 0.16 mm
- Packed in 1 oz. boxes; case contains ten boxes
- Quantities given below are approximate

6662F43	COVER GLASS, 18 mm, Bk. 310.	\$30.40
6662F46	COVER GLASS, 18 mm, Cs. 3, 100.	304.00
6662F55	COVER GLASS, 22 mm, Bk. 229.	32.00
6662F58	COVER GLASS, 22 mm, Cs. 2, 200.	320.00
6662F67	COVER GLASS, 25 mm, Bk. 193.	32.75
6662F70	COVER GLASS, 25 mm, Cs. 1, 600.	327.50

Circles, No. 2, Red Label

- Thickness 0.19 to 0.23 mm
- Packed in 1 oz. boxes; case contains ten boxes
- Quantities given below are approximate

6662O43	COVER GLASS, 18 mm, Bk. 200.	\$36.00
6662O46	COVER GLASS, 18 mm, Cs. 2, 300.	360.00
6662O55	COVER GLASS, 22 mm, Bk. 150.	28.10
6662O58	COVER GLASS, 22 mm, Cs. 1, 500.	281.00
6662O67	COVER GLASS, 25 mm, Bk. 110.	21.75
6662O70	COVER GLASS, 25 mm, Cs. 1, 100.	217.50



RED LABEL™ COVER GLASSES

Rectangles, No. 1, Red Label



6663F10

- Thickness 0.13 to 0.16 mm
- Thomas numbers 6663F10, F13 and G13 through G70 are packed in cardboard boxes, the rest are packed in plastic boxes
- Sizes given in millimeters
- Packed in 1 oz. boxes; case contains ten boxes
- Quantities given are approximate

6663F10	COVER GLASS, 11 x 22, Bx. 310	209.00
6663F13	COVER GLASS, 11 x 22, Cs. 3, 100	209.00
6663F19	COVER GLASS, 22 x 30, Bx. 100	14.40
6663F22	COVER GLASS, 22 x 30, Cs. 1, 200	144.00
6663F37	COVER GLASS, 22 x 36, Bx. 110	12.15
6663F40	COVER GLASS, 22 x 36, Cs. 1, 100	121.50
6663F46	COVER GLASS, 22 x 40, Bx. 90	12.15
6663F49	COVER GLASS, 22 x 40, Cs. 1, 000	121.50
6663F55	COVER GLASS, 22 x 50, Bx. 80	12.15
6663F58	COVER GLASS, 22 x 50, Cs. 800	121.50
6663F64	COVER GLASS, 24 x 30, Bx. 110	14.30
6663F67	COVER GLASS, 24 x 30, Cs. 1, 100	143.00
6663F73	COVER GLASS, 24 x 36, Bx. 100	12.15
6663F76	COVER GLASS, 24 x 36, Cs. 1, 000	121.50
6663F82	COVER GLASS, 24 x 40, Bx. 90	12.15
6663F85	COVER GLASS, 24 x 40, Cs. 000	121.50
6663F91	COVER GLASS, 24 x 50, Bx. 70	15.00
6663F94	COVER GLASS, 24 x 50, Cs. 700	166.50
6663G13	COVER GLASS, 24 x 60, Bx. 50	12.15
6663G16	COVER GLASS, 24 x 60, Cs. 500	121.50
6663G21	COVER GLASS, 35 x 50, Bx. 50	12.15
6663G24	COVER GLASS, 35 x 50, Cs. 500	121.50
6663G40	COVER GLASS, 35 x 62, Bx. 40	13.25
6663G43	COVER GLASS, 35 x 62, Cs. 400	132.50
6663G45	COVER GLASS, 43 x 50, Bx. 34	12.15
6663G52	COVER GLASS, 43 x 50, Cs. 340	121.00
6663G67	COVER GLASS, 48 x 60, Bx. 28	12.15
6663G70	COVER GLASS, 48 x 60, Cs. 280	121.50

Rectangles, No. 1½, Red Label



6663K19

- Sizes given in millimeters
- Packed in 1 oz. plastic boxes; case contains ten boxes
- Quantities given below are approximate

6663K19	COVER GLASS, 22 x 30, Bx. 102	\$11.70
6663K22	COVER GLASS, 22 x 30, Cs. 1, 000	117.00
6663K40	COVER GLASS, 22 x 40, Bx. 78	11.30
6663K48	COVER GLASS, 22 x 40, Cs. 780	113.00
6663K55	COVER GLASS, 22 x 50, Bx. 67	11.85
6663K58	COVER GLASS, 22 x 50, Cs. 670	118.50
6663K64	COVER GLASS, 24 x 30, Bx. 96	14.30
6663K67	COVER GLASS, 24 x 30, Cs. 960	143.00
6663K82	COVER GLASS, 24 x 40, Bx. 70	12.15
6663K85	COVER GLASS, 24 x 40, Cs. 700	121.50
6663K91	COVER GLASS, 24 x 50, Bx. 56	11.85
6663K94	COVER GLASS, 24 x 50, Cs. 560	116.50
6663L13	COVER GLASS, 24 x 60, Bx. 47	12.15
6663L16	COVER GLASS, 24 x 60, Cs. 470	121.50

Rectangles, No. 2, Red Label



6663O10

- Sizes given in millimeters
- Packed in 1 oz. plastic boxes; case contains ten boxes
- Quantities given are approximate

6663O10	COVER GLASS, 11 x 22	
Bx. 240		\$20.90
Cs. 2, 400		209.00
6663O19	COVER GLASS, 22 x 30	
Bx. 100		14.40
6663O22	COVER GLASS, 22 x 30	
Cs. 1, 000		144.00
6663O64	COVER GLASS, 24 x 30, Bx. 90	12.15
6663O67	COVER GLASS, 24 x 30	
Cs. 900		121.50
6663O73	COVER GLASS, 24 x 36, Bx. 80	17.20
6663O76	COVER GLASS, 24 x 36	
Cs. 800		172.00
6663O82	COVER GLASS, 24 x 40, Bx. 60	16.65
6663O85	COVER GLASS, 24 x 40	
Cs. 600		166.50
6663O91	COVER GLASS, 24 x 50, Bx. 50	16.65
6663O94	COVER GLASS, 24 x 50	
Cs. 500		166.50
6663R13	COVER GLASS, 24 x 60, Bx. 25	16.85
6663R16	COVER GLASS, 24 x 60	
Cs. 250		168.50
6663R31	COVER GLASS, 35 x 50, Bx. 35	17.25
6663R34	COVER GLASS, 35 x 50	
Cs. 350		172.50
6663R40	COVER GLASS, 43 x 50, Bx. 28	17.20
6663R52	COVER GLASS, 43 x 50	
Cs. 280		172.00
6663R58	COVER GLASS, 43 x 70, Bx. 24	25.00
6663R61	COVER GLASS, 43 x 70	
Cs. 240		250.00
6663R67	COVER GLASS, 48 x 60, Bx. 27	12.15
6663R70	COVER GLASS, 48 x 60	
Cs. 270		121.50



24-hour order turnaround!

Thomas ships over 99% of domestic orders for in-stock items the same day we receive them. That's a record we are extremely proud of! On request, we can even assure overnight delivery of a customer's order via national and international carriers.

CORNING

MICRO COVER GLASSES

Corning Optical Glass



6667F24 and 6669F72

- Water-white glass sheet
- No. 1, 1½, or 2 thicknesses
- Squares or rectangles

Cut from machine-drawn, flat, water-white glass sheet highly resistant to corrosion, created for micro cover glass use. Thickness to within tolerances: No. 1, 0.13 to 0.16 mm; No. 1½, 0.16 to 0.19 mm; No. 2, 0.19 to 0.25 mm. Uniform surfaces virtually free from irregularities. Glass meets Federal Specification DD-G-426. Case contains ten 1 oz. packages.

No. 1 Thickness Squares

6667F24	COVER GLASS, 18 mm, 10 oz. Cs.	\$101.39
6667F38	COVER GLASS, 22 mm, 10 oz. Cs.	101.39
6667F48	COVER GLASS, 25 mm, 10 oz. Cs.	101.39

No. 1-1/2 Thickness Squares

6667K24	COVER GLASS, 18 mm, 10 oz. Cs.	\$103.61
6667K36	COVER GLASS, 22 mm, 10 oz. Cs.	103.61
6667K48	COVER GLASS, 25 mm, 10 oz. Cs.	103.61

No. 2 Thickness Squares

6667Q24	COVER GLASS, 18 mm, 10 oz. Cs.	\$82.59
6667Q36	COVER GLASS, 22 mm, 10 oz. Cs.	82.59
6667Q48	COVER GLASS, 25 mm, 10 oz. Cs.	82.59

No. 1 Thickness Rectangles

6668F18	COVER GLASS, 22 x 30 mm, 10 oz. Cs.	\$101.39
6668F27	COVER GLASS, 22 x 40 mm, 10 oz. Cs.	101.39
6668F36	COVER GLASS, 22 x 50 mm, 10 oz. Cs.	101.39
6668F54	COVER GLASS, 24 x 30 mm, 10 oz. Cs.	101.39
6668F63	COVER GLASS, 24 x 40 mm, 10 oz. Cs.	101.39
6668F72	COVER GLASS, 24 x 50 mm, 10 oz. Cs.	101.39
6668F81	COVER GLASS, 24 x 60 mm, 10 oz. Cs.	101.39

No. 1½ Thickness Rectangles

6669K18	COVER GLASS, 22 x 30 mm, 10 oz. Cs.	\$103.61
6669K27	COVER GLASS, 22 x 40 mm, 10 oz. Cs.	103.61
6669K36	COVER GLASS, 22 x 50 mm, 10 oz. Cs.	103.61
6669K54	COVER GLASS, 24 x 30 mm, 10 oz. Cs.	103.61
6669K63	COVER GLASS, 24 x 40 mm, 10 oz. Cs.	103.61
6669K72	COVER GLASS, 24 x 50 mm, 10 oz. Cs.	103.61
6669K81	COVER GLASS, 24 x 60 mm, 10 oz. Cs.	103.61

ERIE SCIENTIFIC

GOLD SEAL® MICRO COVER GLASSES

Moistur-Barrier® Packaging



6672A02

- Made from non-fogging, corrosion-resistant glass
- Thickness is controlled to the following tolerances: No. 0 is 0.085 to 0.12 mm; No. 1, 0.13 to 0.17 mm

Lint-free plastic boxes with hinged lid. Cover glasses are packaged 1 oz. per box; case contains 10 boxes. Cases are wrapped in plastic and foil to seal out moisture. Bags of desiccant are packed within the case to absorb interior moisture.

No. 0 Thickness Squares

6672A02	COVER GLASS, 22 x 22 mm, 1 oz. Bx.	\$26.79
6672A04	COVER GLASS, 22 x 22 mm, 10 oz. Cs.	241.11
6672A06	COVER GLASS, 24 x 60 mm, 1 oz. Bx.	26.92
6672A08	COVER GLASS, 24 x 60 mm, 10 oz. Cs.	242.26

No. 1 Thickness Squares

6672A10	COVER GLASS, 18 x 18 mm, 1 oz. Bx.	\$12.47
6672A12	COVER GLASS, 18 x 18 mm, 10 oz. Cs.	112.22
6672A14	COVER GLASS, 22 x 22 mm, 1 oz. Bx.	12.47
6672A16	COVER GLASS, 22 x 22 mm, 10 oz. Cs.	112.22

No. 1 Thickness Rectangles

6672A18	COVER GLASS, 22 x 30 mm, 1 oz. Bx.	\$12.47
6672A20	COVER GLASS, 22 x 30 mm, 10 oz. Cs.	112.22
6672A22	COVER GLASS, 22 x 35 mm, 1 oz. Bx.	12.47
6672A24	COVER GLASS, 22 x 35 mm, 10 oz. Cs.	112.22
6672A26	COVER GLASS, 22 x 40 mm, 1 oz. Bx.	12.47
6672A28	COVER GLASS, 22 x 40 mm, 10 oz. Cs.	112.22
6672A30	COVER GLASS, 22 x 50 mm, 1 oz. Bx.	12.47
6672A32	COVER GLASS, 22 x 50 mm, 10 oz. Cs.	112.22
6672A34	COVER GLASS, 24 x 30 mm, 1 oz. Bx.	11.87
6672A36	COVER GLASS, 24 x 30 mm, 10 oz. Cs.	106.83
6672A38	COVER GLASS, 24 x 40 mm, 1 oz. Bx.	12.47
6672A40	COVER GLASS, 24 x 40 mm, 10 oz. Cs.	112.22
6672A42	COVER GLASS, 24 x 50 mm, 1 oz. Bx.	12.47
6672A44	COVER GLASS, 24 x 50 mm, 10 oz. Cs.	112.22
6672A46	COVER GLASS, 24 x 60 mm, 1 oz. Bx.	12.47
6672A48	COVER GLASS, 24 x 60 mm, 10 oz. Cs.	112.22
6672A50	COVER GLASS, 30 x 50 mm, 1 oz. Bx.	12.47
6672A52	COVER GLASS, 35 x 50 mm, 10 oz. Cs.	112.22
6672A54	COVER GLASS, 35 x 60 mm, 1 oz. Bx.	12.47
6672A56	COVER GLASS, 35 x 60 mm, 10 oz. Cs.	112.22
6672A58	COVER GLASS, 43 x 50 mm, 1 oz. Bx.	12.47
6672A60	COVER GLASS, 43 x 50 mm, 10 oz. Cs.	112.22
6672A62	COVER GLASS, 43 x 60 mm, 1 oz. Bx.	12.47
6672A64	COVER GLASS, 48 x 60 mm, 10 oz. Cs.	112.22
6672A66	COVER GLASS, 48 x 65 mm, 1 oz. Bx.	12.47
6672A68	COVER GLASS, 48 x 65 mm, 10 oz. Cs.	112.22

No. 1 Thickness Circles

6672A71	COVER GLASS, 22 mm, 1 oz. Bx.	\$80.19
6672A72	COVER GLASS, 22 mm, 10 oz. Cs.	451.70
6672A75	COVER GLASS, 13 mm, 1 oz. Bx.	132.41
6672A76	COVER GLASS, 13 mm, 10 oz. Cs.	1,191.71

HIRSCHMANN

ASPIRETTE™ VACUUM TWEEZERS

For picking up small items at the press of a button



666712

- Light and handy
- Ergonomically designed
- One-button operation
- Interchangeable suction cups

Vacuum tweezers are versatile and powerful. The power mechanism is a high-performance vacuum pump provided with a re-chargeable battery. Pressing the control button starts the vacuum, and releasing the button stops it and releases the object immediately. Various size pick-up needles and interchangeable suction cups allow you to work with items up to 70 grams. Suction nozzles may be autoclaved to accommodate "Aseptic Technique", needed for all culture work. Battery life is 1000 cycles. Also available in a "conductive version" (anti-static). Comes with suction nozzle kit, battery charger and operator manual.

666712	ASPIRETTE VACUUM TWEezer, 120V.....	\$249.00
666714	ASPIRETTE ANTI-STATIC TWEezer, 120V.....	250.00
666716	AIR FILTER SET (3) Ea.....	4.99
666718	SUCTION NOZZLE KIT (3, 2, 6, 10 mm) Ea.....	27.00
666720	SUCTION NOZZLES 19mm Pk 10.....	80.00



Can't find it?

If a manufacturer's name or catalog number is not shown, don't assume that the item you want to purchase cannot be supplied by us. We are constantly adding new products to our stock, and many other products can be readily purchased for you on a special order basis.

Your Thomas Technical Sales Representative or Customer Service Representative will be glad to assist you.

Call: 800 345 2100

Government Accounts call: 800 524 1364



SLIDER™ MICRO SLIDE DISPENSER

- Designed exclusively for use with 6684820 series Thomas Slider-Pak™ micro slides for dispensing 3-x 1-inch slides directly from the Slider-Pak, eliminating contamination of slides caused by handling when loading dispenser



6684450

- Dispensed slides are clean and fresh—no dust, dirt, smudges or fingerprints
- Thomas Slider is made of anodized aluminum, with rubber feet

Overall dimensions 101 mm wide x 145 mm deep (with delivery platform pulled out) x 99 mm high. Space is provided in base for storage of spare Slider-Pak. Slides sold separately, see Thomas numbers 6684820 through 852 below.

6684450 MICRO SLIDE DISPENSER..... \$59.99

RED LABEL™ SLIDER-PAK™

Slides for Thomas Slider™ Dispensers

- Eliminate "hands-on" contamination of slides when loading dispenser

Each Slider-Pak contains approximately 100 slides. For micro slide descriptions see 6684130.



6684820

Plain Slide

6684820	SLIDE, 3 x 1-in. Slider-Pak.....	\$17.40
6684822	SLIDE, 3 x 1-in. Co. 10 Slider-Paks.....	174.00

Etched on One Side

6684850	SLIDE, 3 x 1-in. Slider-Pak.....	\$18.45
6684852	SLIDE, 3 x 1-in. Co. 10 Slider-Paks.....	184.50

RED LABEL[®] SLIDES**Thin, Corrosion Resistant,
3 x 1-inch**

6684H30

- Thickness: only 0.96-1.06 mm
- Of highest quality regarding optical characteristics, planeness of surface and thickness uniformity
- Individually pre-cleaned
- Red Label slides are packaged in a compact box, 108 mm long, with inner cellophane wrap for protection from lint
- Packs contain approximately 100 slides
- Heat-sealed, cellophane outer wrapper shields box from dust and moisture
- Slides extend 6 mm above edge of box to assist grasping edges of a single slide

6684H30 is 3" x 1", plain.

6684H52 of same dimensions as 6684H30, but with evenly etched area 19 mm wide on both sides of one end for marking with ink, lead or wax pencil.

6684H61 is similar to 6684H52, but with etching on only one side.

Plain

6684H30	SLIDE, 3 x 1-in., Pack	..... \$16.30
6684H32	SLIDE, 3 x 1-in., 10 Packs	..... 163.50

Etched on Both Sides

6684H52	SLIDE, 3 x 1-in., Pack	..... \$27.70
6684H54	SLIDE, 3 x 1-in., 10 Packs	..... 277.00

Etched on One Side

6684H61	SLIDE, 3 x 1-in., Pack	..... \$27.80
6684H63	SLIDE, 3 x 1-in., 10 Packs	..... 278.00

Standard Thickness, Plain

6685H20

- Of the best available slide glass
- Excellent quality, specifically as to surface finish and uniform thickness
- Highly resistant to attack by moisture
- Thickness ranges between 1.10 and 1.30 mm
- Two grades identical as to stability, optical quality and planeness of surface

Clinical Slides individually pre-cleaned, ground edges.

Economy Slides cut from same glass, but edges and corners are square; practical for routine and student use; not individually pre-cleaned. Inner wrap of cellophane safeguards slides from lint.

Slides measure 3" x 1". Each box of 1/8 gross is wrapped in cellophane and heat-sealed for protection from dust and moisture.

6685P20	SLIDES, Clinical, Gross	..... \$30.85
6685P28	SLIDES, Clinical, 12 Gross	..... 308.50
6685H20	SLIDES, Economy, Gross	..... 28.95
6685H28	SLIDES, Economy, 12 Gross	..... 289.50

Etched on Two Sides

6685M20

- With 19 mm marking surface etched evenly on both sides at one end of 3" x 1" slide
- Velvet matte finish takes lead pencil, wax pencil or ink

6685M20 and M28 Slides are Special Grade; 6685M60 and M68 Slides are Clinical Grade.

6685M20	SLIDES, Etched End, Gross	..... \$46.60
6685M28	SLIDES, Etched End, 12 Gross	..... 468.00
6685M60	SLIDES, Etched End, Gross	..... 35.65
6685M68	SLIDES, Etched End, 12 Gross	..... 356.50

Etched on One Side

6685Q20

- With 19 mm sandblasted area, on one surface only, at one end of 3" x 1" slide
- Takes pencil or pen markings
- Clinical grade

6685Q20	SLIDES, Etched End, Gross	..... \$39.15
6685Q28	SLIDES, Etched End, 12 Gross	..... 391.50

NOTE: Thomas Red Label Slides are counted by weight. Quantities are approximate.

Thomas Scientific

ERIE SCIENTIFIC

FROSTED SLIDES

Superfrost® Series



6685K10

- Coated, indissoluble marking surface, for clearer, more readable slide labeling and more accurate slide identification

6685K10 through K17 are 1 mm thick.
6685K40 through K47 are 1.2 mm thick.

6685K10	SLIDE, 25 x 75 x 1 mm, Gross	..... \$37.95
6685K12	SLIDE, 25 x 75 x 1 mm, Cs. 1, 440	..... 375.90
6685K15	SLIDE, 3 x 1 in, Gross	..... 37.00
6685K17	SLIDE, 3 x 1 in, Cs. 1, 440	..... 370.00
6685K40	SLIDE, 25 x 75 x 1.2 mm, Gross	..... 43.25
6685K42	SLIDE, 25 x 75 x 1.2 mm, Cs. 1, 440	..... 432.50
6685K45	SLIDE, 3 x 1 in, Gross	..... 44.40
6685K47	SLIDE, 3 x 1 in, Cs. 1, 440	..... 444.00

Colorfrost® Series

- Coated, indissoluble marking surface, for clearer, more readable slide labeling and more accurate slide identification
- Single size Colorfrost slides, 25 x 75 mm, have color-coded labels for grouping slides in categories
- All Colorfrost slides are 1 mm thick

6685L10	SLIDE, Blue, 25 x 75 mm, Gross	..... \$35.30
6685L12	SLIDE, Blue, 25 x 75 mm, Cs. 1, 440	..... 353.00
6685L15	SLIDE, Green, 25 x 75 mm, Gross	..... 35.30
6685L17	SLIDE, Green, 25 x 75 mm, Cs. 1, 440	..... 353.00
6685L20	SLIDE, Pink, 25 x 75 mm, Gross	..... 35.30
6685L22	SLIDE, Pink, 25 x 75 mm, Cs. 1, 440	..... 353.00
6685L25	SLIDE, Yellow, 25 x 75 mm, Gross	..... 35.30
6685L27	SLIDE, Yellow, 25 x 75 mm, Cs. 1, 440	..... 353.00

ERIE SCIENTIFIC

SUPERFROST® SERIES SLIDES

Superfrost Plus Series

- Permanent positive charge

Slides form bridge so that covalent bond develops between fixed sections and glass. Ends background staining.

6685L40	SLIDE, White, 25 x 75 mm, Gross	..... \$66.85
6685L42	SLIDE, White, 25 x 75 mm, Cs. 1, 440	..... 566.50
6685L44	SLIDE, Blue, 25 x 75 mm, Gross	..... 59.20
6685L46	SLIDE, Blue, 25 x 75 mm, Cs. 1, 440	..... 592.00
6685L48	SLIDE, Green, 25 x 75 mm, Gross	..... 59.20
6685L50	SLIDE, Green, 25 x 75 mm, Cs. 1, 440	..... 592.00
6685L52	SLIDE, Pink, 25 x 75 mm, Gross	..... 59.20
6685L54	SLIDE, Pink, 25 x 75 mm, Cs. 1, 440	..... 592.00
6685L56	SLIDE, Yellow, 25 x 75 mm, Gross	..... 59.20
6685L58	SLIDE, Yellow, 25 x 75 mm, Cs. 1, 440	..... 592.00

Superfrost Plus Gold Slides



6685L60

- No need for sprays or adhesives on slide
- Uses glass adhesive technology
- For use in histology, pathology and cytology
- Recommended for frozen tissue samples

Slides have adhesive technology which first attaches and then chemically bonds fresh or formalin fixed frozen tissue sections firmly to the surface of the slide. Ideal for adhering tissue that is otherwise difficult to bond without having to use expensive coatings. Compatible with both toluidine blue and hematoxylin and eosin rapid frozen section stains. Box contains 25 slides, case contains 20 boxes.

6685L60	SUPERFROST PLUS GOLD SLIDE, Box 25	..... \$33.75
6685L62	SUPERFROST PLUS GOLD SLIDE, Cs. 500	..... 675.00

ROUND CORNER SLIDES

Exclusive slides with rounded corners for improved safety



6685M72

- Rounded corners eliminate the risk of puncture and exposure to blood-borne pathogens
- Lint free box and wicking paper
- Clear cello wrap and unique box creates moisture barrier and protects against damage

An excellent product for doctor's offices and labs. Slides are precleaned and conveniently packaged in a 72-count box. Size: 3 x 1".

6685M72	SLIDE, PLAIN, 3 x 1 in, Pk. 72	..... \$11.35
6685M74	SLIDE, PLAIN, 3 x 1 in, Cs. 1, 440	..... 227.00

ENVIRONMENTAL SLIDES

Exclusive packaging eliminates moisture and cardboard dust

- Desiccant and air flow channels absorb moisture
- Reusable molded plastic box/slide rack
- Lint free box and wicking paper
- Clear cello wrap and unique box creates moisture barrier and protects against damage

Plain and single-frosted slides available. Slides are precleaned. Size: 76 x 25 x 1 mm. Packaged in a convenient, 72-count box.

6685N02	MICROSLIDE, Plain, Pk. 72	..... \$9.95
6685N04	MICROSLIDE, Plain, Cs. 20 x 72	..... 199.00
6685N06	MICROSLIDE, Sandblasted, Pk. 72	..... 12.15
6685N08	MICROSLIDE, Sandblasted, Cs. 20 x 72	..... 243.00



RED LABEL® SPECIAL USE SLIDES

Special 2 x 3 inch size



6686K20

- Thickness 1.10-1.30 mm
- Washed, with plain edges
- Clinical grade

6686K20	MICRO SLIDE, 2 x 3 in., Glass	355.90
6686K25	MICRO SLIDE, 2 x 3 in., Co. 720	219.50

Special 3 1/4 x 4 inch size



6686M20

- Thickness 1.10-1.30 mm
- Washed, with plain cut edges
- Clinical grade

6686M20	MICRO SLIDE, 3 1/4 x 4 in. Pl. 12	532.40
6686M23	MICRO SLIDE, 3 1/4 x 4 in. Glass	388.80

Fluorescent Antibody Test



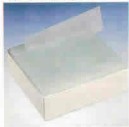
6686N10

- For F.T.A syphilis test
- Size 3" x 1", with two etched rings and an etched marking area at one end
- Thickness 0.96 to 1.06 mm

6686N10 Slide has 10 mm rings;
6686N15 Slide has 15 mm rings.

6686N10	MICRO SLIDE, 10 mm, Glass	339.60
6686N15	MICRO SLIDE, 15 mm, Glass	391.60

Cytology, Etched Surface



6686N62

- Size 3" x 1", with one surface etched over entire area; fluids adhere more readily
- Thickness 0.96-1.06 mm
- With ground edges.

6686N62	CYTOLOGY SLIDE, Glass	335.00
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CORNING

MICROSCOPE SLIDES

Process Clean



6686Q18

- Thickness 0.96 to 1.06 mm
- Packaged in boxes of 144

6686Q18	MICROSLIDE, 3 x 1 in., Co. 1, 440	\$196.36
6686Q25	MICROSLIDE, 75 x 98 mm, Co. 720	157.92
6686Q31	MICROSLIDE, 75 x 90 mm, Co. 720	219.31

Frosted End



6686R18

- 75 x 25 mm; thickness 0.96 to 1.06 mm
- 6686R18 Slide has frosted marking surface on one end, on one side; 6686S18 Slide on both sides
- Packaged in boxes of 144, case contains ten boxes

6686R18	MICRO SLIDE, Co. 1, 440	\$200.02
6686S18	MICRO SLIDE, Co. 1, 440	256.35



Let us quote your next order!

Our trained telephone representatives can help you select the products you need and provide a competitive price quote. We can suggest the best buying quantities for maximum savings. Our experienced quotations staff has immediate access to over 250,000 competitively-priced instruments, supplies and reagents.

ERIE SCIENTIFIC

GOLD SEAL[®] MICROSCOPE SLIDESSuper Thin, Pre-Cleaned, Moistur-Barrier[™] Packaging

- Thickness 0.97 to 1.07 mm
- With ground, polished edges
- Of highly corrosion-resistant glass

Packed in individually wrapped boxes. Each box converts into a slide file using inserts provided. Packages of 144 contain two boxes. Cases of 3600 (50 boxes) and Physician's Packs of 720 (10 boxes) are wrapped in plastic and foil to seal out moisture; bags of desiccant are placed inside to absorb interior moisture.

Thomas Numbers 6686S46 and S48 are Physician's Packs. Thomas Numbers 6686S47 and S49 contain five Physicians Packs.

Plain Slides

6686S40	MICROSLIDE, Super Thin, 3 x 1 in., Pk. 144	\$22.15
6686S42	MICROSLIDE, Super Thin, 3 x 1 in., Cs. 3, 600	496.44
6686S44	MICROSLIDE, Super Thin, 75 x 25 mm, Pk. 144	22.15
6686S45	MICROSLIDE, Super Thin, 75 x 25 mm, Cs. 3, 600	496.44
6686S46	MICROSLIDE, Super Thin, 75 x 25 mm, Pk. 720	127.55
6686S47	MICROSLIDE, Super Thin, 75 x 25 mm, Cs. 3, 600	573.96

Rite-On[®] Slides with Frosted Marking Surface at One End on One Side

6686S48	MICROSLIDE, Super Thin, 75 x 25 mm, Pk. 720	\$171.27
6686S49	MICROSLIDE, Super Thin, 75 x 25 mm, Cs. 3, 600	770.73
6686S50	MICROSLIDE, Super Thin, 75 x 25 mm, Pk. 144	30.11
6686S52	MICROSLIDE, Super Thin, 75 x 25 mm, Cs. 3, 600	677.51
6686S54	MICROSLIDE, Super Thin, 3 x 1 in., Pk. 144	30.11
6686S56	MICROSLIDE, Super Thin, 3 x 1 in., Cs. 3, 600	677.51

Rite-On Slides with Frosted Marking Surface on Both Sides at One End

6686S60	MICROSLIDE, Super Thin, 3 x 1 in., Pk. 144	\$30.11
6686S62	MICROSLIDE, Super Thin, 3 x 1 in., Cs. 3, 600	677.44

Extra-Strength, Pre-Cleaned, Moistur-Barrier[™] Packaging

- Several sizes to fit your laboratory needs
- Thickness: 1.15 to 1.25 mm
- Ground and polished edges
- Of highly corrosion-resistant glass

Packed in individually wrapped boxes of 72. Packages of 144 contain two boxes and cases of 3600 (50 boxes) are wrapped in plastic and foil to seal out moisture; bags of desiccant are placed inside to absorb interior moisture.

Plain Slides

6686S80	MICROSLIDE, Extra-Strength, 3 x 1 in., Pk. 144	\$24.14
6686S82	MICROSLIDE, Extra-Strength, 3 x 1 in., Cs. 3, 600	543.25
6686S84	MICROSLIDE, Extra-Strength, 3 x 1 in., Pk. 144	\$32.82
6686S86	MICROSLIDE, Extra-Strength, 3 x 1 in., Cs. 3, 600	738.44

Rite-On Slides with Frosted Marking Surface At One End on Both Sides

6686S88	MICROSLIDE, Extra-Strength, 3 x 1 in., Pk. 144	\$32.82
6686S90	MICROSLIDE, Extra-Strength, 3 x 1 in., Cs. 3, 600	738.44

Plain Slides

6686S96	MICROSLIDE, Extra-Strength, 75 x 50 mm, Pk. 144	\$60.58
6686S98	MICROSLIDE, Extra-Strength, 75 x 50 mm, Cs. 3, 600	655.31



6686S40 series

UltraFrost[™], Rite-On[®] Slides with Moistur-Barrier[™]

- Size: 75 x 25 mm
- Thickness: 0.97 to 1.07 mm
- Of highly corrosion-resistant glass
- Ground and polished edges

Slides are frosted at one end on both sides; one side with smooth coating of enamel paint and one side acid etched. Ceramic coating is resistant to most laboratory reagents.

Cases are wrapped in plastic and foil to seal out moisture. Bags of desiccant are placed inside to absorb interior moisture. Packed in boxes of 72. Package of 144 contains two boxes; case contains 50 boxes.

6696T10	MICROSLIDE, UltraFrost, 75 x 25 mm, Pk. 144	\$36.00
6696T12	MICROSLIDE, UltraFrost, 75 x 25 mm, Cs. 3, 600	888.95

Government Customers



Thomas Scientific is considered a small business for government procurement purposes. For more information, call:

800 524 1364

PLASTIC SLIDES

Vinyl plastic microscope slides



6686V15

- Useful for applications where slides are to be disposed

Also suitable for chemical microscopy where constituents of glass might interfere. Size 3 x 1 inch; thickness 1/8 mm.

6686V15 MICROSLIDE, Vinyl, Pl, 144 \$18.30

ERIE SCIENTIFIC

LIFTER SLIPS™

For use with hybridization solutions



6690R15

- Easy to use
- Variety of uses
- Increase data quality

Lifter slips offer a simple solution to the problem of hybridization non-uniformity. An innovative raised edge design provides

separation and allows for even dispersal of hybridization solution between the DNA chip and coverslip. Allows for increased data quality by eliminating gradients caused by floating standard coverslips on hybridization solutions. The printed bars allow injection of hybridization solutions under the pre-positioned coverslips by capillary action. Capillary attraction ensures that the slips stay in place.

6690R15	LIFTER SLIP, 18 x 18 mm, Pl/Tac	\$77.30
6690R18	LIFTER SLIP, 22 x 22 mm, Pl/Tac	77.30
6690R21	LIFTER SLIP, 22 x 25 mm, Pl/Tac	77.30
6690R24	LIFTER SLIP, 22 x 30 mm, Pl/Tac	77.30
6690R27	LIFTER SLIP, 22 x 40 mm, Pl/Tac	77.30
6690R30	LIFTER SLIP, 22 x 50 mm, Pl/Tac	77.30
6690R33	LIFTER SLIP, 22 x 60 mm, Pl/Tac	77.30
6690R36	LIFTER SLIP, 24 x 24 mm, Pl/Tac	77.30
6690R39	LIFTER SLIP, 24 x 60 mm, Pl/Tac	77.30
6690R42	LIFTER SLIP, 25 x 25 mm, Pl/Tac	77.30
6690R45	LIFTER SLIP, 25 x 35 mm, Pl/Tac	77.30
6690R48	LIFTER SLIP, 25 x 40 mm, Pl/Tac	77.30
6690R51	LIFTER SLIP, 25 x 60 mm, Pl/Tac	77.30

PROBE CLIPS™

"Press-to-Seal" Incubation Chambers for Immunocytochemistry and In Situ Hybridization



6690J20

Probe Clips form a sealed chamber when pressed to a slide containing a specimen, holding reactants in place and preventing any evaporation and reactant loss. Made of a silicone gasket bonded to optically clear, hydrophobic plastic.

- Ready to use
- More uniform staining
- Autoclavable or UV sterilizable
- Microwaveable
- Recover solutions after use



6690J25

Specimens can be incubated for several days, at high temperatures and even in a waterbath. Prevents spilling. Samples can be easily removed. Use in a wide variety of

applications: probe incubations, color and fluorescent signal development, analyte retrieval and blocking.

Chamber areas designed to accommodate single or multiple free-floating or affixed tissue sections, squash or purified chromosome preparations, cytocentrifuge or cell suspensions and monolayers, using reagent volumes up to 500 µL.

6690J05	CHAMBER, 20 µL, Fig. 25	\$140.00
6690J10	CHAMBER, 50 µL, Fig. 30	166.40
6690J15	CHAMBER, 200 µL, Fig. 25	141.30
6690J20	CHAMBER, 500 µL, Fig. 50	156.85
6690J25	BATH HOLDER	42.85
6690J30	BATH HOLDER, Fig. 5	214.25

Probe-Clip CoverWells™ for Imaging



6690J40

- Confocal and image analysis
- Prevent compression and movement of artifacts
- Made from ultra-thin, support material

For use with transmitted light and fluorescence microscopy. By pressing a Probe-Clip to a microscope slide or coverslip, a sealed chamber is formed to contain mounting medium without messy adhesive or leakage. Can be removed simply by peeling.

6690J40	COVERWELL, 20 x 65 mm, Fig. 40	\$100.00
6690J42	COVERWELL, 20 x 1.0 mm, Fig. 40	103.55
6690J44	COVERWELL, 20 x 2.0 mm, Fig. 20	58.55
6690J46	COVERWELL, 20 x 2.5 mm, Fig. 20	62.85
6690J48	COVERWELL, 28 x 0.4 mm, Fig. 25	103.55

PROBE CLIPS™

HybriSlips™

- Clear, hydrophobic plastic
- RNase free
- Will not chip or break

Meet the specifications required for *in situ* hybridization applications. Do not bind probes to surface like glass. Are ready to use without any pretreatment. Surface is protected from contamination by clean release liners which are easily removed using forceps. Do not curl (even at high temperatures) and facilitate the even distribution of probe solutions.



6690J64

6690J60	HYBRISLIP, 22 x 22 mm, Pkg. 100	.....	\$25.00
6690J62	HYBRISLIP, 22 x 22 mm, Co. 1, 000	.....	250.00
6690J64	HYBRISLIP, 22 x 40 mm, Pkg. 100	.....	30.00
6690J66	HYBRISLIP, 22 x 40 mm, Co. 1, 000	.....	300.00
6690J68	HYBRISLIP, 22 x 60 mm, Pkg. 100	.....	35.00
6690J70	HYBRISLIP, 22 x 60 mm, Co. 1, 000	.....	350.00

HybriWells™



6690J75

- RNase free and non-cytotoxic
- Temperature resistant
- Hydrophobic

Seal securely to microscope slides in seconds. Remove cleanly and easily after heating. Ports allow easy syringe or pipettor access for the addition or removal of reactants. Units are completely transparent and inert.

6690J75	HYBRIWELL, 100 µL, Pkg. 100	\$204.00
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THOMAS-BOERNER

MICRO TEST SLIDES WITH WELL

- Flush Top
- Glass is 106 x 57 x 4 1/2 mm thick, with rounded corners and ten mold-pressed cells
- Cells are depressed, each surrounded by a moat and without projecting rings above the surface of the slide
- Cells are 15 mm diameter at top x 2 mm deep x 13 mm diameter at bottom
- Bottoms of the cells are very slightly concave and slightly rounded at the periphery, providing for thorough mixing and a flattened drop of almost uniform depth
- Space is provided for wax pencil numbers alongside each cell
- Two narrow strips of glass molded in bottom prevent scratching of under surface
- Because of thickness, the slides are rugged; the flat top surface permits stacking without danger of chipping the cell rings



6690K10

Designed especially for use in the Boerner-Jones Lukens microflocculation test and adopted for the cardioliip in syphilis test and general flocculation and agglutination tests, blood typing, drop reactions and other procedures involving small quantities of fluid, i.e. from 0.01 to 0.15 ml.

See R.B.H. Gradwohl, *Laboratory Methods and Diagnosis*, 5th Ed. (1956) Vol. 1, pg. 1007; and John A. Kolmer and Fred Boerner, *Approved Laboratory Technic*, 4th Ed. (1945) pg. 715.

6690K10	BOERNER SLIDE, Ea.	\$36.95
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BD BIOSCIENCES

SPRAY-CYTE™ CYTOLOGICAL FIXATIVE

Designed for preservation of cell smears in exfoliative cytology

- Water soluble, in convenient 1.5 oz aerosol spray can; propellant contains no chlorofluorocarbons
- Protective coating prevents drying out prior to staining
- Cell distortion is avoided and initial appearance of cell structure is retained



6704M05

6704M05	SPRAY-CYTE, 1.5 oz Can	.....	\$2.79
6704M07	SPRAY-CYTE, Co. 12 Cans	.....	105.75

BD BIOSCIENCES

CYTOSEAL™ MOUNTING MEDIA

Clear, Colorless and made from acrylic resins



- Dries rapidly and will not become brittle or yellow with age
- Can be used with oil immersion objectives and in fluorescent procedures
- Will not "cold flow" to edge of slide during long term storage
- Soluble in toluene or xylene

Anti-oxidant added to formula to prevent fading of slides. Low viscosity medium (60 cps) is for use with cover glasses. High viscosity medium (280 cps) provides thicker coating, minimal spread.

6705A05

Low Viscosity Medium

6705A05	MOUNTING MEDIUM, CytoSeal, 4 oz.	\$37.90
6705A07	MOUNTING MEDIUM, CytoSeal, 4 oz. Cs. 12	\$61.32
6705A10	MOUNTING MEDIUM, CytoSeal, 16 oz.	\$7.95
6705A12	MOUNTING MEDIUM, CytoSeal, 16 oz. Cs. 12	733.85

High Viscosity Medium

6705A15	MOUNTING MEDIUM, CytoSeal, 4 oz.	\$35.15
6705A17	MOUNTING MEDIUM, CytoSeal, 4 oz. Cs. 12	282.42

MICRO-CLEAR™

Non-regulated, non-polluting clearing agent replacement for xylene



CS07J50

- Can be disposed of as non-hazardous waste
- Colorless and odorless

Micro-Clear was designed to universally clear alcohol from tissue and can be used as a clearing agent in a variety of open and closed tissue processors. It is a modified biodegradable mixture of isoparaffinic hydrocarbons which replaces harsh and toxic clearing agents such as xylene and will not adversely affect tubing and chamber seals on tissue processors.

Micro-Clear clears and replaces the alcohols in tissues and, because of its miscibility with molten paraffin, allows for its adequate infiltration. Because of its mild and gentle clearing properties on tissues, prolonged exposure to Micro-Clear will not produce brittle and hard tissues. There is no significant difference in shrinkage of protein when compared with xylene.

CS07J50	MICRO-CLEAR, 1 Gallon	\$46.75
CS07J52	MICRO-CLEAR, 4 x 1 Gallon	187.00

MOUNTING MEDIA

Micro-Cover™ Mounting Media



6705A25

- Modern, synthetic resin dissolved in toluene
- Dries rapidly
- Clear, does not yellow with age

Specifically formulated for use with Micro-Clear™ (Thomas number CS07J50) clearing agent, but is also compatible with slides processed through xylene.

6705A25	MOUNTING MEDIA, 120 mL	\$30.00
6705A27	MOUNTING MEDIA, 4 x 120 mL	60.00

Permafluor™ Aqueous Mounting Media



6705A30

- Xylene and toluene-free
- Water-based solvent
- High pH ensures maximum fluorescence of FITC
- Does not contain antifade

6705A30	MOUNTING MEDIUM, Aqueous, 6 mL	\$25.95
6705A32	MOUNTING MEDIUM, Aqueous, 30 mL	59.60

MICRO SLIDE RINGS



6706R12

- Glass, with edges finely ground, for cementing on ordinary slides to make cells
- Height x o.d. indicated in listings

6706R12	SLIDE RING, 3 x 15 mm, Pk. 12	\$15.80
6706R24	SLIDE RING, 5 x 18 mm, Pk. 12	19.60

MICRO SLIDE DISPENSERS

Polypropylene Slide Dispenser

- Easy to load

Unique design simplifies slide loading. Standard slides (3" x 1" or 25 x 75 mm) slide effortlessly into the front of the dispenser. Turning either side wheel dispenses slides one at a time.



6707D40

6707D40 SLIDE DISPENSER \$34.95

Stainless Steel Slide Dispenser



6707D60

- Stainless steel, with lever for ejecting a single 3" x 1" slide
- Opening can be set for slides of various thicknesses

Front plate is removable for refilling. Holds 45 to 54 slides, depending on thickness. Height overall: 108 mm. Cushioned base is 76 x 127 mm.

6707D60 MICRO SLIDE DISPENSER \$92.29



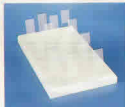
PLASTIC SLIDE HOLDERS

High density polypropylene, for drying slides and for draining excess immersion oil

- Channels which hold slides are 2.5 mm wide x 15 mm deep and extend the full width of holder; distance between channels is approximately 23 mm
- Curved edges for better finger grip
- Both holders utilize non-skid rubber feet

6707G30 is 102 x 305 mm (4" x 12");
6707G40 is 178 x 305 mm (7" x 12") and both are 19 mm (3/4") high.

Slide capacity given in listings is the maximum number of 25 x 75 mm slides holder will take. Holders can also be used for larger slides with a corresponding reduction in slide capacity.



6707G40

6707G30 MICRO SLIDE HOLDER, 33-Slide \$29.95
6707G40 MICRO SLIDE HOLDER, 75-Slide \$32.29

SIMPORT

UNIMAILER® SLIDE MAILER

A brand new approach to microscope slide handling and mailing

Made of high impact polystyrene, each UniMailer holds one slide (25 x 75 mm / 1" x 3" with or without a cover glass), safely and securely. Stackable for mailing and/or storing multiple slides, they are secured by an innovative locking mechanism with a hole provided for attaching tamper-proof ties. Five pastel colors and four writing surfaces allow for easy identification. Great for accessing one slide at a time while other slides are kept well protected by the strong plastic which ensures rigidity and avoids any slide breakage.



6707G41

6707G41	UNIMAILER, Blue, Pk. 50	.....	\$10.19
6707G43	UNIMAILER, Blue, Cs. 200	.....	40.60
6707G45	UNIMAILER, Green, Pk. 50	.....	10.15
6707G47	UNIMAILER, Green, Cs. 200	.....	40.40
6707G49	UNIMAILER, Pink, Pk. 50	.....	10.15
6707G51	UNIMAILER, Pink, Cs. 200	.....	40.60
6707G53	UNIMAILER, White, Pk. 50	.....	10.15
6707G55	UNIMAILER, White, Cs. 200	.....	40.60
6707G57	UNIMAILER, Yellow, Pk. 50	.....	10.15
6707G59	UNIMAILER, Yellow, Cs. 200	.....	40.60

MICRO SLIDE MAILERS

Polypropylene



6707M30

- Holds five 3" x 1" slides
- Rigid, compact, lightweight

One-piece molded construction, with slide separation ridges and hinged, tight-fitting lid. Dimensions: 83 x 29 x 16 mm.

6707M30 MICRO SLIDE MAILER, Ck. 200\$45.00

Polypropylene, Leak Proof



6707M40

- Leakproof for easy express courier shipment
- Holds up to 10 slides securely
- Molded-in slide separator
- Hinged, fully gasketed lid fits snugly

Can also be used as a staining jar. Compact 3½" x 1½" x 1½" size.

6707M40 SLIDE MAILER, Ck. 40\$148.00

Cardboard



6707M17

- Folder with insets for two 3" x 1" slides with coverglass
- Sturdy cardboard construction

6707M17 MICRO SLIDE MAILER Ck. 250\$129.00

MICROSCOPE SLIDE BOXES

50 Place



6708F30

- Secure clasp
- Assorted colors
- ABS plastic
- Cork lining

Inventory sheets inside box cover makes organizing slides easier. Dimensions: 8.3" x 3.4" x 1.25".

6708F30	SLIDE BOX, 50 Place, Blue	\$5.00
6708F31	SLIDE BOX, 50 Place, Red	6.00
6708F32	SLIDE BOX, 50 Place, Green	6.00

100 Place



6708F50

- Color-coded for easy identification
- Foam lining
- Boxes stack securely on top of each other
- Rust resistant nickel-plated clasp and hinge pin

Slots are numbered to correspond with inventory sheet on the inside cover of the box. Dimensions: 8.75" x 6.75" x 1.5".

6708F50	SLIDE BOX, 100 Place, Blue	\$10.95
6708F51	SLIDE BOX, 100 Place, Green	10.95
6708F52	SLIDE BOX, 100 Place, Red	10.95
6708F53	SLIDE BOX, 100 Place, Yellow	10.95
6708F54	SLIDE BOX, 100 Place, White	10.95

SLIDE STORAGE BOXES



6708G28

- For 3" x 1" slides
- Of one-piece molded construction including clasp, hinges and dust-proof lid
- Two longitudinal ridges in bottom of box raise slides slightly from bottom; pressing on one end of a slide lifts the other end for easy removal
- Alternate high and low slide separators on both sides make it easy to match opposing slots when loading
- Numbered slide positions correspond to printed index in lid

6708G08 Box has a 25 slide capacity; overall dimensions 111 x 89 x 32 mm high.

6708G28 Box has a 100 slide capacity; overall dimensions 210 x 175 x 32 mm high.

6708G08	SLIDEROX, 25, 3 x 1 in., Bx, 12	.....	\$30.60
6708G12	SLIDEROX, 25, 3 x 1 in., Cs, 144	.....	\$67.20
6708G28	SLIDEROX, 100, 3 x 1 in., Bx, 12	.....	\$9.60
6708G31	SLIDEROX, 100, 3 x 1 in., Cs, 48	.....	\$26.40

Wooden Micro Slide Box

- Takes 100 slides, either 3" x 1" or 75 x 25 mm
- Plastic rack is numbered 1 to 100, with corresponding index in lid

Hinged lid overlaps rack to exclude dust; with latch. Paper covered wooden construction. Overall 244 x 197 x 35 mm.



6708J15

6708J15	SLIDE BOX, 100, 3 x 1 in.	\$21.05
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SLIDE STORAGE BOXES

Polystyrene Micro Slide Box, with Cork Liner

- Shock-resistant polystyrene
- With numbered grooves for 100 slides 3" x 1" or 75 x 25 mm

Bottom is lined with cork. Hinged lid contains numbered index and has a sliding clasp. Overall dimensions 211 x 175 x 33 mm deep.



6708L12

6708L12	SLIDE BOX, 100, 3 x 1 in., Pk. 6	\$75.00
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Clay Adams® Plastic Micro Slide Box

- Molded plastic, takes 25 slides, either 3" x 1" or 75 x 25 mm
- Base has grooves for interlocking with lid of box below when stacking

Includes dust-proof cover. Overall dimensions approximately 95 mm square x 35 mm high.



6708L32

6708L32	SLIDE BOX, 3 x 1 in., Pk. 10	\$74.90
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Micro Slide Folders

- Of reinforced cardboard, with index on outside of cover
- Inner panels of cover are recessed to contact only ends of slides, for protection of specimens

Overall dimensions when closed, 203 x 343 x 9.5 mm thick. Folder has 20 individual, numbered receptacles for 3" x 1" slides.



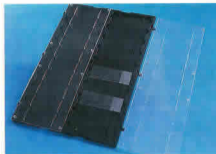
6708M10

6708M10	MICRO SLIDE FOLDER, 3 x 1 in.	\$11.35
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DYN-A-MED

POP UP SLIDE FOLDERS

Offer full slide visibility



6708M15

- Transparent covers
- Chemically resistant
- Hold up to 20 slides

Folders are designed to give a clear view of slides, even when closed and easy access to all slides in the folder. The slides are placed in the folder at an angle for better viewing and easy "pop-up" removal. The cover helps to hold slides in place for transporting.

6708M15 POP UP SLIDE FOLDER \$9.99

6708M20 POP UP SLIDE FOLDER, Ck. 12 109.20

THOMAS-BROWN

MICRO SLIDE FILER



6708S10

- Aluminum, 3" x 5"
- Holds four, 3" x 1" micro slides
- Lower edge turned upward to support slides

Upper edge cut with semicircular notches to aid in handling the slides; upper edge applies pressure against slide, preventing loss. Holder fits any filing cabinet for 3" x 5"

cards. When filed, labels easily read. Eight holders occupy approximately 25 mm of space.

6708S10 MICRO SLIDE FILER, Pk. 100 \$140.00

SLIDE CABINETS

Steel Slide Cabinets



6708E50

- Made of heavy gauge steel with a baked-on enamel finish; cabinets are stackable using interlocking tabs
- Each has six individual drawers and holds up to 5,000 standard 3" x 1" glass slides
- Cabinet construction prevents drawers from falling out accidentally, but they can be disengaged for use at a work area

Cabinets are compatible with other cabinets on the market and can be stacked interchangeably. A base unit, sold separately, provides solid support for the cabinet and rests on scratch-proof rubber feet. Cabinet and base are available in beige or ivory.

Drawers have either black phenolic pull knobs or steel handles. Foam rubber dividers keep slides upright when drawers are partially filled. Identification tabs are included for labeling.

Each slide cabinet is fully inspected before shipment and is packaged using recyclable, biodegradable materials.

Cabinet dimensions (L x W x H): 18 $\frac{1}{2}$ " x 15 $\frac{1}{2}$ " x 4 $\frac{1}{2}$ ". Shipping weight: 32 pounds. Base unit dimensions (L x W x H): 18 $\frac{1}{2}$ " x 15 $\frac{1}{2}$ " x 2 $\frac{1}{2}$ ". Shipping weight: 8 pounds.

6708E50 SLIDE CABINET 5,000-Slide, Beige \$134.00

6708E55 SLIDE CABINET 5,000-Slide, Ivory 134.00

6708E60 CABINET BASE, Beige 64.00

6708E65 CABINET BASE, Ivory 64.00

4

Phone
800.345.2100
856.467.2000

Fax
800.345.5232
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Easy Ways to Order

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P.O. Box 99
Sweedenboro, NJ 08085

Electronic
• www.thomassci.com
• e-commerce
• ETN

SLIDE CABINETS

Wooden Slide Cabinets

- Of substantial oak, with 100 stamped aluminum trays, each compartment to hold 20 slides size 3" x 1" or 75 x 25 mm

Supports slides horizontally, so that they are entirely visible and can be dried in storage position to lessen handling. Total capacity, 2,000 slides. Tray is deep enough to hold two slides in each compartment using appropriate spacer, therefore increasing capacity to 4,000 slides. Trays move in their own slots.



6709C10

With drawer for card index. Outside dimensions (H x W x D, mm): 565 x 438 x 349; shipping weight, 29.5 kg.

6709C10 SLIDE CABINET, 2000/4000 Slide Capacity \$1,432.00

Unit System

- Developed on principle of unit card index
- Each unit consists of 25, 6709C60 Aluminum Trays, each taking 20 slides size 3" x 1" or 75 x 25 mm, producing total capacity of 500 slides

Slides are held horizontally in individual compartments for full visibility and to allow drying in storage. Tray is deep enough to hold two slides in each compartment by separating with suitable spacer, thus increasing capacity to 1,000 slides.



6709C50

Hardwood case occupies total area of 216 x 330 mm; approximately 279 mm high. Front door lifts and slides into space above trays. Can be stacked side by side or on top of each other in an exceedingly small space.

6709C50 SLIDE CABINET, 500/1000 Slide Capacity \$410.00
6709C60 SLIDE TRAY 16.00

TBS

MINOTOME PLUS[®] CRYOSTAT

- Accommodates reusable knives and disposable blades
- Automatic or manual advance/retract feature
- Control panel is user and glove friendly
- 2-42 μ m thick sections
- CFC free



6725A07

The same proven Minotome that has been the technician's choice for nearly 70 years has been placed inside the new Minotome Plus Cryostat. The new, easy-to-use motorized specimen advance-and-retract feature offers the ultimate in speed, convenience and safety. It also keeps operators' hands out of the chamber entirely. The only reason to go in are to place the specimen on the holder or to adjust the micron setting. The new design of the Minotome Plus[™], with its

inset sides and steeper front, increases user comfort. It features cool-down to -30°C with accurate temperature control at the knife edge. A knife safety guard offers the operator further protection from injury. Included is a -40°C quick freeze plate which accommodates numerous samples and convenient temperature readout. The cryostat offers automatic and manual defrost modes.

The Minotome Plus includes: knife guards, heat extractor and anti-roll assembly. Additional accessories include disposable blade holder, heavy duty disposable blades, two specimen plates (concentric circle and cross-hatched, 26 mm), lubricating oil, freezing spray, freezing medium, dyes for specimen samples, 3 brushes (1/8", 1/4", 3/8" W bristles), specimen holder shelf and protective mat. Dimensions: 45" H x 25.5" W x 27" D, 269 lbs.

For reusable knives and disposable blades, see Thomas No.'s 6725D50 through 6725D60 and 6740A25 through A40.



6725A19

SPECIFICATION CHART:

Section Thickness	Thickness Increments	Temp. Control Range	Chamber Cool-Down
2 - 42 μ m	2 μ m	Ambient to -30°C	Ambient to -20°C in 60 min.

6725A01	MINOTOME PLUS CRYOSTAT, 115 V	.....	\$15,800.00
6725A04	MINOTOME PLUS CRYOSTAT, 200/240 V	.....	16,800.00
6725A07	SPECIMEN HOLDER, Circular, 26 mm	.....	50.00
6725A10	SPECIMEN HOLDER, Cross-Hatch, 26 mm	.....	50.00
6725A13	KNIFE, Tempered Steel, 12 cm	.....	285.00
6725A16	ANTI-ROLL ASSEMBLY	.....	260.00
6725A19	ANTI-ROLL PLATE, with Feed Screw	.....	50.00

TBS

MINOTOME PLUS™ CRYOSTAT ACCESSORIES

Shur/Freeze™ Cryogen Spray



Shur/Freeze™ cryogen spray meets new federal environmental specifications. Tissue blocks can now be cooled to -60°C with this environmentally friendly refrigerant. The adjustable flow rate is controlled by a convenient trigger mechanism. Contains tetrafluoromethane.

6725A50

6725A50	SHUR/FREEZE SPRAY, 12 oz. Can	\$16.00
6725A53	SHUR/FREEZE SPRAY, 12 oz. Can, Pack 12	192.00

TFM™ Tissue Freezing Medium



Embedding matrix for frozen sections. Unique formula reduces curling, allowing easier pickups of fat serial sections. Reduced water content minimizes freeze fractures. Color variety makes differentiating multiple specimens easy. Available in clear, transparent blue, yellow, green and red.

6725A60 series

6725A60	TISSUE FREEZE MEDIUM, Clear, 4 oz. Pack 12	\$150.40
6725A65	TISSUE FREEZE MEDIUM, Yellow, 4 oz. Pack 4	54.00
6725A79	TISSUE FREEZE MEDIUM, Green, 4 oz. Pack 4	54.00
6725A75	TISSUE FREEZE MEDIUM, Red, 4 oz. Pack 4	54.00
6725A80	TISSUE FREEZE MEDIUM, Blue, 4 oz. Pack 4	54.00
6725A85	TISSUE FREEZE MEDIUM, Assorted, 4 oz. Pack 4	118.80
6725A86	TISSUE FREEZE MEDIUM, Assorted, 4 oz. Cs. 20	495.20

Shur/Lube™ Lubricating Oil

For the cleaning, lubrication and protection of your microtomes and cryostats in high volume laboratories and extreme temperature environments.

6725A00	SHUR/LUBE MICROTOME OIL, 1oz. Case 6	\$76.00
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Brushes



Camel hair brushes, ideal for transferring frozen sections, $\frac{1}{8}$ " x $\frac{1}{4}$ " and $\frac{1}{8}$ " width bristles. One of each in pack of 3.

6725A05

6725A05	BRUSHES, Assorted, Pack 3	\$28.00
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TBS

CUT™ MICROTOMES

Customize to fit your needs



6725C13

- Non-retracting and retracting microtomes
- Coarse advance handwheel in 3 different styles
- Section thickness indicator, 0.5 to 60 µm

The CUT microtome series creates a user-friendly microtome that is built to last and ideal for use in high production lab settings. The microtome is mounted on a one-piece metal base and enclosed in a polycarbonate housing. A debris protector shields the internal mechanisms. The specimen arm has a 70 mm vertical stroke and a 40 mm horizontal extension. The coarse advance mechanism arm is protected from over-extension when the specimen arm has reached the full extent of its travel in either direction. The handwheel can be ordered side-mounted to provide forward movement of the specimen arm when turned in either a clockwise (forward) or counter-clockwise (reverse) direction or front mounted, forward feed. Rotation of the fine advance handwheel simultaneously provides both vertical movement of the specimen arm past the cutting surface and precise horizontal movement of the specimen advance. Other features include maintenance-free cross roller guides and multiposition push-button safety lock on the handwheel.

Model 6725C01 is a non-retracting microtome and has all the features mentioned above. The 6725C10 microtome has all the features of the 6725C01 plus mechanical retraction. This prevents contact between the specimen and blade during the return stroke. It eliminates the accumulation of debris on the back edge of the blade, extends blade life and improves section consistency. An additional autotrim feature of the 6725C10 accelerates trimming by providing 3 pre-set positions for controlled coarse advance of 10, 20 and 30 µm. This model also features an integrated LCD information display which counts the number of revolutions of the fine advance handwheel and resets instantly with the push of a button.

Both models include a maintenance tool kit, multi-purpose oil, waste tray, ParaGard™ paraffin repellent and dust cover. Overall dimensions: 18"L x 18"W x 11"H, 36 lbs.

Specimen holder and blade holder accessories are required and sold separately. See Thomas numbers 6725C19 through C49.

TBS

CUT™ MICROTOMES (continued)

6725C40

SPECIFICATIONS

Horizontal Object Advance:	Maximum 40 mm
Vertical Cutting Stroke:	Maximum 70 mm
Automatic Retraction (6725C19):	80 µm
Autotrim (6725C10):	Step 1: 10 µm; Step 2: 20 µm; Step 3: 30 µm
Specimen Size:	Standard Object Clamps: Max size (55 x 55) mm; Universal Cassette Clamp for standard cassettes
Specimen Orientation:	X and Y axes 8° (6725C19 & 6725C22)
Permissible Storage:	Temp. Range: 20 to 50°C
Performance:	Range of Section Thickness: 0.5 µm incrementally from 0.5 to 2 µm; 1.0 µm increments from 2.0 to 10 µm; 5.0 µm increments from 20 to 60 µm

6725C01	MICROTOME, Non-Retractable, Reverse	95,999.00
6725C04	MICROTOME, Non-Retractable, Forward	6,999.00
6725C07	MICROTOME, Non-Retractable, Front	8,899.00
6725C10	MICROTOME, Retractable, Reverse	8,897.50
6725C13	MICROTOME, Retractable, Forward	8,897.50
6725C16	MICROTOME, Retractable, Front	8,897.50

**24-hour order turnaround!**

Thomas ships over 98% of domestic orders for in-stock items the same day we receive them. We are extremely proud of this record! On request, we can even assure overnight delivery of a customer's order via national and

TBS

MICROTOME ACCESSORIES**Specimen Orientation Sets**

- For use with 6725C28 and 6725C31

Sets are used for x-y specimen orientation with left side (6725C19) or right side (6725C22) clamping levers or in applications that do not require x-y specimen orientation (6725C25).



6725C25

6725C19	OBJECT ORIENTATION SET, Left Lever	391.00
6725C22	OBJECT ORIENTATION SET, Right Lever	391.00
6725C25	FIXED ADAPTER PIECE	198.20

Specimen Holder

- For square or rectangular blocks

Holds special adapters for non-routine specimens. Universal cassette clamp 6725C31 is a quick-release type for all types of commercially available cassettes.

6725C28	STANDARD OBJECT CLAMP	337.50
6725C31	UNIVERSAL CASSETTE CLAMP	433.90

Universal Knife Holder Base

- Required unless triangular glass or diamond knives are used

For use with 6725C37 and 6725C40 blade holders.



6725C34

6725C34	UNIVERSAL KNIFE HOLDER BASE	335.70
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Knife Holder R

- For conventional steel or tungsten-carbide tipped knives or disposable blade holders

Requires 6725C34 knife holder base.



6725C37

6725C37	KNIFE HOLDER R	387.15
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Disposable Blade Holder

- Use with 6725C43 through C49 and requires 6725C34



6725C40

6725C40	DISPOSABLE BLADE HOLDER	364.25
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TBS

MICROTOME ACCESSORIES (continued)

Disposable Blade Clamping Plates



- Use with 6725C40

Thomas number 6725C43 is used for all common low profile blades, 6725C46 is for common high profile blades, and 6725C49 is for heavy duty disposable knives.

6725C43	LOW PROFILE CLAMP PLATE	\$267.85
6725C46	HIGH PROFILE CLAMP PLATE	267.85
6725C49	HIGH PROFILE CLAMP PLATE, Heavy Duty Blades	267.85

Microtome Oil

6725052	MICROTOME OIL, 100 mL	\$37.00
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Microtome Blade Holders



The Shur/Sharp™ blade holder is designed for interchangeable use of low and high profile blades. Patented one-step lever activated holder performs flawlessly for years. Choose from high or low

profile or heavy duty blade holder. 100% Stainless Steel construction. 6725D01 and 6725D04 require Knife Holder R (6725C37).

6725D01	SHUR/SHARP BLADE HOLDER	\$780.00
6725D04	DISPOSABLE BLADE HOLDER FOR HEAVY DUTY BLADES	695.00
6725D07	DISPOSABLE BLADE HOLDER FOR LOW PROFILE BLADE	695.00
6725D18	DISPOSABLE BLADE HOLDER FOR HIGH PROFILE BLADE	695.00

Disposable Microtome Blades



- For use with disposable blade holders
- Consistently produces virtually compression-free ribbons

Choose from four disposable microtome blades to meet all your sectioning needs. Standard blades for routine tissue samples and heavy duty blades, both coated and uncoated, for cutting difficult tissues and freezes are available.

6725050	DISPOSABLE MICROTOME BLADE, Low Profile, Coated, Pk. 50	\$84.00
6725051	DISPOSABLE MICROTOME BLADE, Low Profile, Coated, Cs. 500	840.00
6725053	DISPOSABLE MICROTOME BLADE, High Profile, Coated, Pk. 50	84.00
6725054	DISPOSABLE MICROTOME BLADE, High Profile, Coated, Cs. 500	840.00
6725056	DISPOSABLE MICROTOME BLADE, High Profile, Uncoated, Pk. 60	82.00
6725057	DISPOSABLE MICROTOME BLADE, High Profile, Uncoated, Cs. 500	620.00
6725059	DISPOSABLE MICROTOME BLADE, Heavy Duty, Pk. 35	105.00
6725060	DISPOSABLE MICROTOME BLADE, Heavy Duty, Cs. 350	1,050.00

THOMAS-STADIE-RIGGS

TISSUE SLICER



6727C10



6727C18

- Used frequently for preparation of thin, uniform sections of fresh tissue as necessary for metabolic studies of tissue in vitro; see *Journal of Biological Chemistry*, Vol. 154, No. 3, p. 687; and Vol. 206, No. 2, p. 525

- Sections average 0.5 mm in thickness
- Consists of three flat plates of carefully machined and polished transparent methacrylate, 13 mm thick, one extended to form a handle and a thin blade with 102 mm cutting edge; not autoclavable

- Nickel-plated brass, detachable handle with wing nut for fastening blade
- Parts separate easily for cleaning

Circular platform, 31 mm diameter x 12 mm high, on base plate; fits into circular opening in middle plate. With 10 blades, 117 mm long.

6727C10	TISSUE SLICER, Stadie-Riggs	\$419.15
6727C18	STEEL BLADES, Cs. 25	36.35
6727C22	STEEL BLADES, Cs. 100	145.40
6727C25	BLADE HANDLE	92.00

LEICA

ROTARY MICROTOME BLADES



6731L15

Made to fit most Low Profile blade holders for rotary microtomes. Supplied in dispenser packs which allow safe removal of blades, one at a time. 3" length, 50 per pack.

6731L15	LOW PROFILE MICROTOME BLADES, Pk. 50	\$80.00
6731L17	LOW PROFILE MICROTOME BLADES, Cs. 500	800.00

Thomas Scientific

PERSONNA MEDICAL

CRYSTAL™ PLUS MICROTOME BLADES

- Disposable
- Superior quality and sharper cutting edge
- One-hand dispenser

Special Micro Coat® coating process allows blades to glide with smooth, clean precision. The ultra-sharp edge produces a straight, uniformly thick paraffin ribbon without nicks, grooves or holes. Allows for easy sectioning and specimen pick-up from water bath. Transparent dispenser box allows blade viewing and safe disposal.



6731L20

6731L20	MICROTOME BLADE, High Profile, Bx 50	\$74.40
6731L22	MICROTOME BLADE, High Profile, Cx 500	744.00

MICROTOME KNIVES

Individually tested for hardness

- Tempered steel with rounded back
- Furnished in metal case with wooden block, which protects knife against damage
- Without handle



6740A15

6740A15	MICROTOME KNIFE, 125 mm	\$327.85
6740A20	MICROTOME KNIFE, 185 mm	482.85

TBS Minotome Plus™ Crystal Knives

- For use with 6725A01 and A04
- Include storage case

6740A25	KNIFE, Conventional Steel, 16 cm, "C" Profile	\$235.70
6740A30	KNIFE, Conventional Steel, 18 cm, "C" Profile	321.40
6740A35	KNIFE, Conventional Steel, 16 cm, "D" Profile	267.85
6740A40	KNIFE, Tungsten Carbide Edged, 16 cm, "D" Profile	1,135.70

Microtome Knife Sets

- Includes knife, handle and stainless steel honing guide in metal case, with wooden block to protect knife
- 6740A65 includes 6740A15 Microtome Knife; 6740A75 includes 6740A20 Knife



6740A65

6740A65	MICROTOME KNIFE SET, 125 mm	\$441.15
6740A75	MICROTOME KNIFE SET, 185 mm	597.70

PHYSITEMP

FREEZING STAGES

Perfect for multiple sectioning of brains and other organs too large for cryostats

- Fast freezing preserves cell detail
- Freeze to temps as low as -40°C
- Temperature adjusts for optimum cutting
- Quick thaw for easy cleanups



6740A86, A83, A80

Freezing stages have no moving parts and require only AC current and a trickle of water for operation. Freezing begins immediately and can be maintained indefinitely. Stage temperature is adjustable so that optimum cutting temperatures can be set for different kinds of tissue. Stages can also be used to control the temperature of materials other than tissue and have been used in research on integrated circuits, photo diodes, liquid crystals, wax formation on fuel oils and even freezing concrete.

6740A80	SMALL FREEZING STAGE, 1.25" x 1.5"	\$1,831.00
6740A83	SMALL FREEZING STAGE, 1.5" x 1.5"	1,885.00
6740A86	LARGE FREEZING STAGE, 3" x 3.125"	2,586.00



EMBEDDING BLOCKS

- For celloidin or paraffin sections
- Of phenolic resin, which can be legibly marked with a glass marking pencil



6755810

Deep cut grid in top surface provides firm hold for embedded specimen. Blocks are 19 mm high.

6755810	BLOCK, 1/2 x 1/2 in., Pr. 10	\$18.05
6755815	BLOCK, 3/4 x 3/4 in., Pr. 10	34.05
6755820	BLOCK, 1 x 1/2 in., Pr. 10	28.85
6755825	BLOCK, 1 x 1 in., Pr. 10	47.20

HISTOLOGY/CYTOLOGY ACCESSORIES

Disposable HistoPlas Tissue Capsules



6755V10, Y20, Y70

- White plastic, with hinged lid and marking surface, for tissue processing

Diameter x depth are given in listings. Smaller size is suitable for biopsy tissue. Both sizes are available in other colors on special order.

6755V10	TISSUE CAPSULE, 20 x 8 mm, Pk. 500	\$36.50
6755V50	TISSUE CAPSULE, 36 x 8 mm, Pk. 500	36.50

Biopsy Pads, Polyester Foam, HistoPlas

- For use with tissue capsules and cassettes to hold very small specimens and curettings during processing
- Of blue cellular, foamed polyester plastic, uniformly perforated to permit fluid circulation; thickness 3 mm

25 mm size for use with 6755V10 Capsule. 35 mm size for use with 6755V50 capsule. 6762Y40 Pad assortment contains both the 25 and 35 mm round pads.

Round Pads

6755Y20	BIOPSY PAD, 25 mm, Pk. 1,000	\$37.50
6755Y30	BIOPSY PAD, 35 mm, Pk. 1,000	37.50
6755Y40	PAD ASSORTMENT, Pk. 1,000	37.50

Rectangular Pad

6755Y70	BIOPSY PAD, 25 x 31 mm, Pk. 1,000	\$55.00
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SIMPOR PLASTICS

HISTOSETTE® I

Processing/embedding cassettes with 45° angle writing area



6755Y75 series

- Suitable for cassette labeling instruments
- Acetal polymer construction
- Assorted colors
- Chemically resistant
- Large labeling areas

Disposable plastic cassettes hold tissue specimens very efficiently during the embedding process, as well as in a storage file. Molded

from a special high density polymer, these cassettes keep specimens safely submerged in solvent and are totally resistant to the chemical action of histological solvents. Efficient flow-through slots maximize fluid exchange and ensure proper drainage.

One-piece integral lid eliminates the need for separate steel lids. They can be opened or closed as often as necessary, and they always relock securely without danger of specimen loss. Large labeling areas are located on three sides of the cassette for your convenience.

6755Y75	HISTOSETTE, White, Co. 1500	\$197.30
6755Y77	HISTOSETTE, Pink, Co. 1500	197.30
6755Y79	HISTOSETTE, Green, Co. 1500	197.30
6755Y81	HISTOSETTE, Yellow, Co. 1500	197.30
6755Y83	HISTOSETTE, Blue, Co. 1500	197.30
6755Y85	HISTOSETTE, Peach, Co. 1500	197.30
6755Y87	HISTOSETTE, Tan, Co. 1500	197.30
6755Y89	HISTOSETTE, Grey, Co. 1500	197.30
6755Y91	HISTOSETTE, Lilac, Co. 1500	197.30
6755Y93	HISTOSETTE, Orange, Co. 1500	197.30
6755Y95	HISTOSETTE, Aqua, Co. 1500	197.30

Disposable Base Molds



6756B01 series

- Excellent thermal exchange
- Inexpensive enough to justify one-time use
- Strong enough for multiple uses

Because of their specially formulated plastic material, they offer excellent thermal exchange. Smooth interior finish and rounded corners

facilitate their removal. Available in the same variety of sizes as metal molds and can be used with the same styles or types of cassettes and embedded rings.

6756B01	BASE MOLD, 7 x 7 mm, Co. 1000	\$125.85
6756B03	BASE MOLD, 15 x 15 mm, Co. 1000	125.85
6756B05	BASE MOLD, 24 x 24 mm, Co. 1000	125.85
6756B07	BASE MOLD, 30 x 24 mm, Co. 1000	125.85
6756B09	BASE MOLD, 37 x 24 mm, Co. 1000	125.85

TISSUE EMBEDDING RINGS

- Available in 5 different colors for color-coding in the laboratory

Tissue is taken from the capsules and placed into stainless steel or plastic base molds. The labeled ring is placed atop the base mold, filled with paraffin and cooled. The rings allow for a uniform block and are readily identified when filed.



6756850 series

6756850	TISSUE EMBEDDING RING, White, Pk. 500	\$50.00
6756852	TISSUE EMBEDDING RING, Yellow, Pk. 500	50.00
6756854	TISSUE EMBEDDING RING, Pink, Pk. 500	50.00
6756856	TISSUE EMBEDDING RING, Green, Pk. 500	50.00
6756858	TISSUE EMBEDDING RING, Blue, Pk. 500	50.00

HISTOLOGY/CYTOLOGY ACCESSORIES

Tissue Embedding Medium, Oxford Paraplast, Paraplast-Plus and Paraplast X-tra

- Purified paraffin compounded with plastic polymers of regulated molecular weights
- Perfectly clear when melted; no filtration required
- Minimizes tissue compression and wrinkling
- Sections can be cut without crumbling or cracking and can be stained in conventional manner

Standard Paraplast permits serial sectioning to 4 microns. Paraplast-Plus contains dimethylsulfoxide to improve filtration and penetration characteristics and allow cutting sections of 4 μ m thickness in short ribbons. Both have an ASTM melting point of 56°C. Paraplast X-tra is a unique blend of low molecular weight polymers and paraffins; ASTM melting point, 50-54°C; cuts to 2 μ m thickness. All types are furnished in pellet form, in packages of 1 kg.



6761E75

6761E55	PARAPLAST, Ct. 6 x 1 kg.	\$38.80
6761E75	PARAPLAST-PLUS, Ct. 6 Pk.	43.02
6761E85	PARAPLAST X-TRA, Ct. 6 Pk.	43.28

Histomount X

Synthetic resin in Xylene. Microscopy mounting medium.

C382A20	HISTOMOUNT X, 16 cc.	\$34.80
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MICRO-CLEAR™

Non-regulated, non-polluting clearing agent replacement for xylene

- Can be disposed of as non-hazardous waste
- Colorless and odorless

Micro-Clear was designed to universally clear alcohol from tissue and can be used as a clearing agent in a variety of open and closed tissue processors. It is a modified biodegradable mixture of isoparaffinic hydrocarbons which replaces harsh and toxic clearing agents such as xylene and will not adversely effect tubing and chamber seals on tissue processors.



C507J50

Micro-Clear clears and replaces the alcohols in tissues and, because of its miscibility with molten paraffin, allows for its adequate infiltration. Because of its mild and gentle clearing properties on tissues, prolonged exposure to Micro-Clear will not produce brittle and hard tissues. There is no significant difference in shrinkage of protein when compared with xylene.

C507J50	MICRO-CLEAR, 1 Gallon	\$48.75
C507J52	MICRO-CLEAR, 4 x 1 Gallon	187.00

TBS

PARA-GARD™ PARAFFIN REPELLENT

Prevents wax from sticking to equipment and countertops

- Stops paraffin from sticking to countertops and equipment while keeping everything looking brand new
- Pleasant smelling and non-toxic
- Safe for use on metal, wood and plastic surfaces



6761E87

6761E87	PARA-GARD, 4 oz.	\$14.25
6761E90	PARA-GARD, 4 oz., Ct. 6	85.50

Product Alert!



Manufacturers may modify existing products or introduce new products. Call your Customer Service Representative for the latest models, pricing and specifications.

BOEKEL

TISSUE FLOTATION BATH

Model 145700 lighted Tissue Flotation Bath is designed to eliminate wrinkles and distortions in the preparation of paraffin-embedded tissue sections



6762R01

- Combination of illuminated black background and transparent glass dish makes specimens easier to see
- Easily removable dish for cleaning, fast water changes or sterilizations
- UL Listed

Control panel features LCD, ON/OFF power and lamp switches, pilot light and thermostat dial. Exterior is stainless steel gray enamel finish. Unit Dimensions: 4 1/2" H x 15 1/2" W x 13 1/2" D. Dish Dimensions: 1 1/2" H x 5 1/2" W x 10 1/2" L. Power requirements: 115 VAC, 60 Hz, 600 W. Temperature: ambient +5 to 60°C. Weight: 12 lbs.

6762R01 TISSUE FLOTATION BATH, LIGHTED, 115 V, 50/60 Hz, 600 W \$703.59

Double Warranty Protection

When you buy your laboratory instruments from us, you are protected in two ways. First, by the manufacturer's warranty and second, by the **Exclusive Thomas Scientific One Year Warranty** (see the introduction for details).

The **Thomas Warranty** provides that all instruments sold by us will be free from defects in materials and workmanship for one year from the date of our invoice to the buyer. We guarantee complete satisfaction of products purchased from Thomas Scientific.

LAB-LINE

SLIDE WARMER

Ideal for cytology, histology, pathology, biology, industrial and clinical laboratories engaged in paraffin tissue section mounting



6762S20

- Surface temperature adjustable from slightly above ambient to 65°C
- Holds up to 58 - 1" x 3" (2.5 x 7.6 cm) glass slides
- Combination thermal-film heater provides uniform heat transfer over entire "sta-flat" surface
- Built-in sensitive and adjustable thermostat controls temperatures
- Reference dial on control panel permits reproducible settings
- Heavy gauge, cold-rolled steel enamel housing encloses all controls and insulation

Optional protective metal dust cover is available to accelerate the heating process and to protect the unit when it is not being used. With thermometer, 3-wire cord, pilot light and on/off switch; for 120 V, 50/60 Hz, 160 W. Dimensions: 25" W x 8" D x 3 1/2" H.

6762S20 SLIDE WARMER \$250.00

6762S25 COVER 60.00

Slide Warmer with LED Readout



6762S27

- Similar to 6762S20, but features an LED temperature display
- Large slide capacity and space saving design
- Temperature adjustable from 5° above ambient to 65°C and is displayed on LED readout

Heavy gauge, black anodized aluminum work surface measures 25" x 8". Body is constructed of heavy duty cold rolled steel with a baked polyester enamel finish. Clear acrylic hinged cover is included. For 115 V, 50/60 Hz, 160 W. Dimensions: 25" W x 8" D x 4 1/2" H.

6762S27 SLIDE WARMER with LED \$303.00

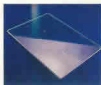
THOMAS-DALTON

SHARPENER ACCESSORIES

Abrasive Film, for Thomas®-Dalton Sharpener



6775E30 through E54



6775E30

- Alumina abrasive, bonded to tough plastic film
- In sheets 152 x 216 mm with self-adhesive backing
- Color-coded to identify grit size

SPECIFICATIONS:

Grit Size, microns	30	12	3	0.3
Color Code	green	yellow	pink	white

6775E30	ABRASIVE FILM, 30 micron, Pk. 10	.....	\$21.75
6775E38	ABRASIVE FILM, 12 micron, Pk. 10	.....	21.95
6775E46	ABRASIVE FILM, 3 micron, Pk. 10	.....	21.75
6775E54	ABRASIVE FILM, 0.3 micron, Pk. 10	.....	21.75
6775E60	GLASS PLATE, 6 $\frac{1}{2}$ x 9 in	.....	79.00

MILK TESTING APPARATUS

Micro Slide, Bacteria Counting, Breed-Brew

- For bacteriological examination of fresh milk smears by direct microscopic method
- 2" x 3" (51 x 76 mm) slide, of resistance glass, with 15 transparent circles, 11.28 mm diameter; area of each circle, 1 cm²
- Remaining slide surface is etched
- Slide thickness, 1.5 mm
- See *APHA, Standard Methods for the Examination of Dairy Products*



6790J72

6790J72	MICRO SLIDE, Pk. 6	\$36.00
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KIMBLE/KONTES

MILK TESTING APPARATUS

Mojonnier® Fat Extraction Flask

- Used to determine fat content in dairy and other food products.
- Settling chamber capacity: 25 mL
- Extraction chamber diameter: 35 mm

Top opening has pouring lip and is tooled for a #0 stopper.



6790A01

6790A01	FAT EXTRACTION FLASK, 25 mL	\$46.22
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Dilatometer Bottle

- Capacity: 1.4 mL
- 14/20 $\frac{1}{8}$ joint
- Graduations/subdivisions: 0-1.4 mL/0.005 mL

For the determination of the solid fat index (an empirical measure of the solid fat content) of shortenings, margarine oils and other fats with a solid index of 50 or less at 10°C. Results are expressed as melting dilution in mL/kg of fat. Method is described in A.O.C.S. Method Cd. 10-57. Stem is made from precision bore tubing and overall accuracy of graduations is ± 0.005 mL. Includes a 329105-000 solid (closed) stopper and one 675300-0014 polyacetel clamp.



6790K05

6790K05	DILATOMETER BOTTLE, Stem Scale	\$167.07
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Babcock Bottle, Skim Milk

- Size 50/100% ($\frac{1}{2}$ %), 18 grams; length 165 mm
- Reading in $\frac{1}{100}$ mL divisions, with auxiliary filling tube
- Also qualified for use in Babcock method for fat in buttermilk.



6793E11

6793E11	BABCOCK BOTTLE, Ck. 12	\$262.00
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KIMBLE/KONTES

MILK TESTING APPARATUS

Babcock Test Dividers, Shimp



6750F50

- For use on neck of Babcock bottles for reading percentage of butterfat
- Of nickel silver, with stainless steel divider points at both ends
- Length: 133 mm
- Legs held in position by spring tension, which adjusts to individual requirements

6793F50 BABCOCK TEST DIVIDERS \$19.00

Paley Bottle, Cheese



6730H20

- Size 50%, 9 grams
- Length 165 mm
- Reading in $\frac{1}{2}\%$, limit of error $\pm\frac{1}{2}\%$
- Three stoppers included with each bottle

6793M20 PALEY BOTTLE, Cheese \$32.27

6793R22 PALEY BOTTLE, Cheese, Cl. 3 \$19.70

Babcock Pipet, Milk



6793M11

- Graduated to contain 17.6 mL, ± 0.05 mL at 20°C
- Calibration ring between 15 and 45 mm above the bulb, complies with American Public Health Association, *Standard Methods for the Examination of Dairy Products*, 14th Ed. (1978); and *Official Methods of Analysis of the Association of Official Analytical Chemists*, 13th Ed. (1980)
- Also complies with Federal Specification DD-P-371

6793M11 BABCOCK PIPET, MILK, Cl. 12 \$11.00

Babcock Pipets, Cream



6793M45

- Calibrated to dispense contents at 20°C
- Meets specifications of the Dominion of Canada for dairy glassware
- 9 mL pipet with ± 0.05 mL tolerance
- 18 mL pipet, ± 0.20 mL tolerance

6793M41 BABCOCK PIPET, 9 mL, Cl. 12 \$82.44

6793M40 BABCOCK PIPET, 18 mL, Each 8.05

Kimble Disposable Milk Pipet



6793M55

- Plastic pipets are plugged, sterile and ready for use with uniform-pulled tip
- Calibrated in subdivisions of 0.5, 1.0 and 1.1 mL for measurement
- 1.1 mL pipet has 0.025 mL tolerance

6793M50 PIPET, 1.1 mL, CL. 1,000 \$32.35

Quevenne Lactometer, Milk



6794L30

- Quevenne scale is graduated from 15° to 40° (equivalent to 1.015 to 1.040 specific gravity) in 0.5° divisions, tolerance $\pm 0.5^\circ$, calibrated at 60°F (15.6°C)
- Enclosed thermometer is graduated from 20° to 100°F in 2° divisions, tolerance $\pm 2^\circ$
- Overall length approximately 315 mm
- For use with cylinder 375 x 50 mm

6794L30 QUEVENNE LACTOMETER \$40.00

TRACEABLE[®]
MOISTURE METER

Displays moisture content of wood, wood products, paper or other substances



6794L36

- Range: 9.0 to 30.0%
- Resolution: 0.1%, accuracy $\pm 4\%$
- NIST Traceable
- Automatic and manual temperature compensation
- Jumbo sized digits (1 $\frac{1}{2}$ " high)

The meter's memory contains nine material groups such as fiber board, construction material and calibrations for 150 species of wood. The user can establish reference moisture readings for other types of products. Serial RS232 output allows it to be connected to a computer or data logger for monitoring and keeping records. A data hold button "freezes" display to capture readings. Instrument can recall highest, lowest and average readings. Meters includes probe, 10 spare pins, NIST Traceable Certificate, 9 V alkaline battery and serial computer output. Dimensions: 7 x 3 x 1 $\frac{1}{2}$ "; weight: 9.5 oz.

6794L36 MOISTURE METER \$300.20

6794L40 DATA ACQUISITION 72.14

6794L42 DATA LOGGER 366.22

ROTRONIC

HYROPALM AW1 WATER ACTIVITY SET

Portable, digital unit with interchangeable probes



6794T01

- Multiple inputs allow four probes simultaneously

Water activity (a_w) is the relative humidity which is reached at equilibrium in a sealed container where a hygroscopic product has been placed, but expressed on a scale of 0...1. Water activity defines the active part of moisture content in a product and influences microbiological, chemical and enzymatic stability of perishable products such as food or seeds.

Set includes HygroPalm AW1 indicator; AW-D10 probe for the measurement of product samples; WP14 sample holder; PS14 Disposable, 14 mm deep sample cups (pk. 100); one box each of EA35 (35% RH) and EA80 (80% RH) humidity calibration standards; and carrying case.

Optional accessories include 40 mm deep Sample Cup Holders (6794T43) for chunky product samples as well as a docking station (6794T04) for battery charging (requires use of rechargeable battery) and mains power operation.

6794T01 PORTABLE WATER ACTIVITY METER SET \$2,350.00

Meter Accessories

6794T04	DOCKING STATION	\$135.00
6794T35	CYLINDRICAL SENSOR	65.00
6794T36	SAMPLE CUP HOLDER, 14 mm Deep	95.00
6794T43	SAMPLE CUP HOLDER, 40 mm Deep	115.00
6794T47	PROBE, 5 mm x 50 mm	425.00
6794T51	PROBE, 10 mm x 280 mm	505.00
6794T55	SAWORD PROBE, 16 x 4 x 280 mm	745.00

ZELTEX, INC.

KJT-200 DESKTOP MOISTURE ANALYZER

Quickly and accurately measures moisture content in lab and in-process samples without costly, messy reagents and without Loss on Drying determinations

- Analyze powders, pastes and granular samples without sample preparation or sample destruction
- Uses Near-IR Reflectance Technology for quick, accurate moisture analysis
- Built-in linear quadratic and cubic regression software determines/generates standard curves for accurate measurement of unknowns



6794U01

Non-contact design allows moisture measurement from 0.01% to well over 40% in almost any type of sample - solids, granular, liquids and pastes. Stores 50 separate calibrations in memory for future determinations/PC downloading. Features an automatic zero adjust system. Rotating turntable/sample holder allows for multiple averaging on each sample. Use sample containers with quartz glass covers for hygroscopic samples or aluminum weighing dishes.



6794U05

SPECIFICATIONS:

Measurement Diameter:	620 mm
Response Time:	2 seconds
Display Refresh Cycle:	6.3 seconds
Number of Analytical Curves:	50
Light Source:	Tungsten Lamp (standard life: 20,000 hours)
External Communications:	RS-232 D-SUB25P-M
Self-Adjustment:	Automatic Zero Adjustment
Self-Diagnostic Function:	Error Code Display
Power Source:	AC100V to 240 V, 50/60 Hz
Power Consumption:	36 VA
Ambient Temperature:	10 to 40°C (temperature compensation range)
Accessories:	Sample Containers with Glass Covers, 60 mm x 18 mm (30 sets); Fuse 1A

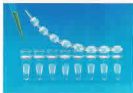
6794U01 KJT-200 MOISTURE ANALYZER, 100 to 240 V, 50/60 Hz \$11,450.00

6794U05 SAMPLE CONTAINERS with QUARTZ GLASS COVERS, Pk. 3 145.00

MOLECULAR BIO-PRODUCTS

HOTSTART® STORAGE AND REACTION TUBES

For researchers working with: *Hot start PCR technique, complex DNA or cDNA that is difficult to amplify, high numbers of cycles (30), very low copy number targets and multiplex PCR*



6826A15

- Pre-positioned wax bead and thin wall tube all in one
- Pre-sterilized
- Synchronizes PCR reactions
- Eliminates mineral oil as a vapor barrier
- Allows long term storage of optimized master mixes



6826A01

Feature a pre-positioned wax bead that eliminates time, splashing of mixture and the chance of contamination. MBP wax bead is stable at room temperature, allowing for unheated preparation of PCR cocktails. Pre-assembly of tube and wax eliminates separate purchases and the chance of bulk beads melting together. HotStart tubes are 0.5 mL and HotStart Micro® tubes are 0.2 mL.

Racked tubes are packaged 96 tubes per rack and 10 racks per case. Strips are packaged twelve 8-well strips per pack and 10 packs per case. Bulk packed tubes are packaged 480 tubes per pack and six packs per case.

6826A01	HOTSTART 20, Racked, Pkg. 96	520.00
6826A03	HOTSTART 20, Racked, Cs. 960	530.00
6826A05	HOTSTART 50, Racked, Pkg. 96	46.80
6826A15	HOTSTART MICRO 20 STRIPS, Cs. 126	360.00
6826A17	HOTSTART MICRO 50 STRIPS, Pk. 12	56.00
6826A19	HOTSTART MICRO 50 STRIPS, Cs. 126	560.00
6826A21	HOTSTART MICRO 20, Bulk, Pk. 480	170.00
6826A23	HOTSTART MICRO 20, Bulk, Cs. 2880	1,020.00
6826A25	HOTSTART MICRO 50, Bulk, Pk. 480	170.00
6826A27	HOTSTART MICRO 50, Cs. 2880	1,020.00
6826A29	HOTSTART 50, Bulk, Pk. 480	160.00
6826A31	HOTSTART 50, Cs. 2880	960.00
6826A33	HOTSTART 100, Bulk, Pk. 480	160.00
6826A35	HOTSTART 100, Cs. 2880	960.00
6826A37	HOTSTART MICRO 50, Racked, Pkg. 96	53.00
6826A39	HOTSTART MICRO 50, Racked, Cs. 960	530.00
6826A41	HOTSTART MICRO 100, Racked, Pkg. 96	53.00
6826A43	HOTSTART MICRO 100, Racked, Cs. 960	530.00

MOLECULAR BIO-PRODUCTS

THIN WALL PCR TUBES



6827A01

- RNase and DNase free
- Non-sterile
- Polypropylene construction

Thin wall construction assures uniform contact with the thermal cycler temperature block for optimal heat transfer. Available in both 8 tube strips and individual 0.2 mL and 0.5 mL tubes to cover all applications. All tubes include caps.

THIN WALL PCR TUBES

THOMAS NO.	TUBE SIZE (mL)	CAP	COLOR	QUANTITY	PRICE
6827A81	0.2	Domed	Natural	Bag 1,000	\$45.00
Cs. 10,000				450.00	
6827A84	0.5	Flat	Natural	Bag 1,000	38.00
Cs. 10,000				380.00	
6827A25	0.5	Flat	Green	Bag 1,000	38.00
Cs. 10,000				380.00	
6827A31	0.5	Flat	Blue	Bag 1,000	38.00
Cs. 10,000				380.00	
6827A37	0.5	Flat	Red	Bag 1,000	38.00
Cs. 10,000				380.00	
6827A43	0.5	Flat	Orange	Bag 1,000	38.00
Cs. 10,000				380.00	
6827A49	0.5	Flat	Purple	Bag 1,000	38.00
Cs. 10,000				380.00	
6827A55	0.5	Flat	Yellow	Bag 1,000	38.00
Cs. 10,000				380.00	
6827A61	0.2	Flat	Natural	Bag 1,000	49.00
Cs. 10,000				490.00	
6827A73	0.2	Flat	Green	Bag 1,000	49.00
Cs. 10,000				490.00	
6827A79	0.2	Flat	Blue	Bag 1,000	49.00
Cs. 10,000				490.00	
6827A85	0.2	Flat	Orange	Bag 1,000	49.00
Cs. 10,000				490.00	
6827A91	0.2	Flat	Purple	Bag 1,000	49.00
Cs. 10,000				490.00	
6827A97	0.2	Flat	Yellow	Bag 1,000	49.00
Cs. 10,000				490.00	
6827B04	0.2	Flat	Natural 8-strip	Bag 120	80.00
Cs. 1,200				800.00	



CHILE-HOT™ THIN WALL PCR TUBES

Thinner and more uniform tubes provide even heat transfer and faster cycle times

- Tubes with attached caps
- Chemically inert, high quality, virgin polypropylene
- Ribbed caps for superior closure
- Certified RNase/DNAse free
- Compatible with all commonly used thermal cyclers



6827295

Available in two volumes, 0.2 mL and 0.5 mL, tubes come in natural or a wide variety of colors. The 0.2 mL size has a domed cap to conform to the various thermal cyclers with heated lids while the 0.5 mL tubes have a flat top to facilitate labeling. Strips of caps and tubes are sold separately, see Thomas numbers 6829A01 through A92.

6827295	PCR TUBE, 0.2 mL, Flat Top, Natural, Bx. 1,000	\$45.00
6827296	PCR TUBE, 0.2 mL, Flat Top, Natural, Cs. 10,000	450.00
6828A02	PCR TUBE, 0.2 mL, Natural, Bx. 100	45.00
6828A04	PCR TUBE, 0.2 mL, Natural, Cs. 1,000	450.00
6828A06	PCR TUBE, 0.2 mL, Blue, Bx. 100	45.00
6828A08	PCR TUBE, 0.2 mL, Blue, Cs. 1,000	450.00
6828A10	PCR TUBE, 0.2 mL, Green, Bx. 100	45.00
6828A12	PCR TUBE, 0.2 mL, Green, Cs. 1,000	450.00
6828A14	PCR TUBE, 0.2 mL, Orange, Bx. 100	45.00
6828A16	PCR TUBE, 0.2 mL, Orange, Cs. 1,000	450.00
6828A18	PCR TUBE, 0.2 mL, Red, Bx. 100	45.00
6828A20	PCR TUBE, 0.2 mL, Red, Cs. 1,000	450.00
6828A22	PCR TUBE, 0.2 mL, Violet, Bx. 100	45.00
6828A24	PCR TUBE, 0.2 mL, Violet, Cs. 1,000	450.00
6828A26	PCR TUBE, 0.2 mL, Yellow, Bx. 100	45.00
6828A28	PCR TUBE, 0.2 mL, Yellow, Cs. 1,000	450.00
6828A30	PCR TUBE, 0.5 mL, Natural, Bx. 100	43.00
6828A32	PCR TUBE, 0.5 mL, Natural, Cs. 10,000	430.00
6828A34	PCR TUBE, 0.5 mL, Blue, Bx. 100	45.00
6828A36	PCR TUBE, 0.5 mL, Blue, Cs. 10,000	450.00
6828A38	PCR TUBE, 0.5 mL, Green, Bx. 1,000	45.00
6828A40	PCR TUBE, 0.5 mL, Green, Cs. 10,000	450.00
6828A42	PCR TUBE, 0.5 mL, Orange, Bx. 1,000	45.00
6828A44	PCR TUBE, 0.5 mL, Orange, Cs. 10,000	450.00
6828A46	PCR TUBE, 0.5 mL, Red, Bx. 1,000	45.00
6828A48	PCR TUBE, 0.5 mL, Red, Cs. 10,000	450.00
6828A50	PCR TUBE, 0.5 mL, Violet, Bx. 1,000	45.00
6828A52	PCR TUBE, 0.5 mL, Violet, Cs. 10,000	450.00
6828A54	PCR TUBE, 0.5 mL, Yellow, Bx. 1,000	45.00
6828A56	PCR TUBE, 0.5 mL, Yellow, Cs. 10,000	450.00
6828A58	PCR TUBE, 0.5 mL, Assorted, Bx. 1,000	45.00
6828A60	PCR TUBE, 0.5 mL, Assorted, Cs. 10,000	450.00



PCR STRIP TUBES AND CAPS

Thinner sides and bottoms speed up cycle times; make for even heat transfer

- Tubes and caps in strips
- Unique ribbed cap design ensures closure during boiling; eliminates evaporation
- Colors for sample coding: blue, green, orange, red, violet, yellow
- Chemically inert high quality, virgin polypropylene



6829A01 series

With a thin, uniform construction for quicker cycles, these brightly colored strip tubes and caps make sample identification easy. Attached dome caps, which conform to various types of heated lids, maintain the samples' isothermal conditions and minimize lid condensation. The polypropylene material used assures sample integrity and superior clarity for sample viewing. They are compatible with all commonly used thermal cyclers.

0.2 mL, Thin Wall PCR Strip Tubes come eight tubes per strip, 125 strips per box.

THOMAS NO.	COLOR	QTY.	PRICE
0.2 ML PCR TUBES IN STRIPS			
6829A01	Natural	Bx. 125	\$78.00
6829A04		Cs. 1,250	780.00
6829A07	Blue	Bx. 125	80.00
6829A10		Cs. 1,250	800.00
6829A13	Green	Bx. 125	80.00
6829A16		Cs. 1,250	800.00
6829A19	Orange	Bx. 125	80.00
6829A22		Cs. 1,250	800.00
6829A25	Red	Bx. 125	80.00
6829A26		Cs. 1,250	800.00
6829A31	Violet	Bx. 125	80.00
6829A34		Cs. 1,250	800.00
6829A37	Yellow	Bx. 125	80.00
6829A40		Cs. 1,250	800.00
6829A42	Assorted	Bx. 1,000	40.50
6829A44		Cs. 10,000	405.00

(continued on next page)



PCR STRIP TUBES AND CAPS (continued)



- Unique ribbed cap design ensures closure during boiling; eliminates evaporation

6829A50 Caps with 6829A01 Tubes

THOMAS NO.	COLOR	QTY.	PRICE
0.2 ML PCR CAPS IN STRIPS			
6829A50	Natural	Bk. 125	\$16.00
6829A63		Cs. 1,250	162.00
6829A05	Blue	Bk. 125	16.40
6829A09		Cs. 1,250	164.00
6829A62	Green	Bk. 125	16.40
6829A65		Cs. 1,250	164.00
6829A68	Orange	Bk. 125	16.40
6829A71		Cs. 1,250	164.00
6829A74	Red	Bk. 125	16.40
6829A77		Cs. 1,250	164.00
6829A80	Violet	Bk. 125	16.40
6829A83		Cs. 1,250	164.00
6829A86	Yellow	Bk. 125	16.40
6829A89		Cs. 1,250	164.00
6829A90	Assorted	Bk. 1,000	40.50
6829A92		Cs. 10,000	720.00

PCR WORK UP RACK WITH STRIP TUBE INSERT

For labs using cycle strips, 8 or 12 tube strips or large quantities of individual 0.2 mL PCR tubes



6830A01 series

- Removable strip-tube rack
- Tube wells are alpha-numerically matrixed
- Fluorescent colors

This rack is designed in the traditional 96-well 8 x 12 microtiter format. Four retainer clips hold a removable 8 x 12 strip tube rack securely in place on the base rack, yet still permit fast and convenient removal and replacement. The rack includes a natural colored lid and is available in five vivid fluorescent base colors to maintain error-free indexing of specific experiments. Frosted writing panels on four sides provide additional identification options.

Additional 96-well strip tube racks with lids are available separately and in the same five fluorescent base colors. Overall dimensions 8 1/2" L x 4 1/2" W x 2" H.

6830A01	PCR WORK RACK, Blue	\$15.00
6830A04	PCR WORK RACK, Green	15.00
6830A07	PCR WORK RACK, Orange	15.00
6830A10	PCR WORK RACK, Pink	15.00
6830A13	PCR WORK RACK, Yellow	15.00
6830A16	STRIP TUBE RACK, 96-Well, Blue	5.50
6830A19	STRIP TUBE RACK, 96-Well, Green	5.50
6830A22	STRIP TUBE RACK, 96-Well, Orange	5.50
6830A25	STRIP TUBE RACK, 96-Well, Pink	5.50
6830A28	STRIP TUBE RACK, 96-Well, Yellow	5.50

4
Easy Ways
to Order



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• e-commerce
• EDI

Thomas Scientific

NUNC

GeNUNC™ STORAGE VIALS AND CODERS

Excellent for centrifugation and storage for PCR reagents, restriction enzymes and other diagnostic and biochemical reagents or samples



6830A40 series

- Available in 0.5 mL and 2.0 mL sizes
- Closure allows easy access to samples
- Can be centrifuged to a maximum of 13,000 x g

All vials have a frosted writing area, and the 2.0 mL sizes have graduations. Vials offer good clarity and excellent chemical resistance to acids, alcohols, aqueous solutions, media and sera. There is no O-ring to fall out or contaminate your reagents or samples. One full turn removes the closure, giving easy access to contents. Vials and closures are supplied assembled and radiation sterilized. Vials are made of a high-purity polypropylene copolymer (PPC0) with low metal content and the screw closures are made of high density polyethylene (HDPE), and are leakproof.

Polystyrene Color Coders, available separately, aid in sample identification.

6830A40	GENUNC STORAGE VIALS, 0.5 mL, Cs. 900	\$95.99
6830A42	GENUNC STORAGE VIALS, 2 mL, Cs. 300	95.99
6830A44	COLOR CODER, White, Bx. 100	5.80
6830A46	COLOR CODER, Yellow, Bx. 100	5.80
6830A48	COLOR CODER, Orange, Bx. 100	5.80
6830A50	COLOR CODER, Green, Bx. 100	5.80
6830A52	COLOR CODER, Red, Bx. 100	5.80
6830A54	COLOR CODER, Blue, Bx. 100	5.80
6830A56	COLOR CODER, Gold, Bx. 100	5.80
6830A58	COLOR CODER, Purple, Bx. 100	5.80
6830A60	COLOR CODER, Natural, Bx. 100	5.80
6830A62	COLOR CODER, Tan, Bx. 100	5.80

NUNC

GeNUNC™ STORAGE BOXES AND RACKS

Storage Vial Boxes



6830B01

- For use with 6830A40 and 6830A42 Storage Vials
- Stores 100 vials in ten by ten array
- Autoclavable
- Stackable

Polycarbonate storage box consists of a base, insert and cover. The insert is removable for storage versatility. The silkscreened grid is resistant to 95% ethanol and isopropanol. The storage box is autoclavable at 121°C for 20 minutes and can be stored at -80°C in a mechanical freezer. The box and lid are keyed for a one way on/off fit preventing orientation errors. The base and the insert are white and the lid is clear with a ten by ten blue grid for easy identification.

6830B01	STORAGE VIAL BOX	\$8.98
6830B03	STORAGE VIAL BOX, Cs. 12	100.37

Storage Vial Racks

- For use with 6830A40 and 6830A42 Storage Vials
- Stores twenty-four 0.5 mL and/or 2.0 mL vials in four by six array

Polyketone racks are chemically resistant to most laboratory chemicals and autoclavable at 121°C for 20 minutes. The rack enables single-handed vial manipulation. The top of each opening interlocks with the neck of each vial permitting closures to be removed or tightened with one hand. Racks are blue and are stackable when empty or full. Racks are supplied with handles.

6830B05	STORAGE VIAL RACK	\$10.48
6830B07	STORAGE VIAL RACK, Cs.4	75.10

NUNC

GeNUNC™ TUBE TRAY AND HOLDER

Tray and holder work in concert to form a workstation that can hold 96 0.2 mL PCR tubes



6831A01

- Transparent, polystyrene lid facilitates stacking
- 8 x 12, 96 well configuration

Streamlines and organizes sample handling, especially in amplification techniques that utilize thermal cyclers. Tray supports tubes in an individual or strip format. Strips and individual tubes are loaded into the tray and the caps are pressed on the tubes. The tray is removed from the holder and placed in the thermal cycler block. Upon the completion of the application, the tray is removed from the thermal cycler and slid back into the holder.

Dimensions: 4.8" L x 3.25" W x 1.1" H.

6831A01	TUBE TRAY AND HOLDER, Each	\$12.75
6831A03	TUBE TRAY AND HOLDER, Cs. 5	57.38
6831A05	TUBE STRIPS, 0.2 mL, Pk. 100 Strips	143.00
6831A07	TUBE STRIPS, 0.2 mL, Cs. 600 Strips	647.58
6831A09	GENUNC TUBES, 0.2 mL, Pk. 1,000	113.98
6831A11	GENUNC TUBES, 0.2 mL, Cs. 10,000	1,025.88

Please Remember



Products listed in the Thomas Catalog are in alphabetical as well as numerical order.

FLIPPER[®] JUNIOR WORK RACK

Small working rack ideal for sequencing procedures



6832A01 series

- Rugged polypropylene construction
- Large easy to read alpha numeric matrix

One side of the rack has 32 wells for 0.5 mL tubes plus an additional 8 wells across for 1.5/2.0 mL tubes. The reverse/flip side has the opposite configuration of 32 wells for 1.5/2.0 mL tubes and 8 wells for 0.5 mL tubes. The Flipper rack is complete with a clear polypropylene lid to protect tubes and samples and allow stacked storage. The rack measures 3 1/2" x 6 1/2" and is available in natural, black and five vivid fluorescent colors: blue, green, orange, pink and yellow.

6832A01	FLIPPER JR. W/LD. Natural	.....	\$6.00
6832A03	FLIPPER JR. W/LD. Natural, Cs. 20	.....	120.00
6832A05	FLIPPER JR. W/LD. Black	.....	6.50
6832A07	FLIPPER JR. W/LD. Black, Cs. 20	.....	130.00
6832A09	FLIPPER JR. W/LD. Blue	.....	6.70
6832A11	FLIPPER JR. W/LD. Blue, Cs. 20	.....	134.00
6832A13	FLIPPER JR. W/LD. Green	.....	6.70
6832A15	FLIPPER JR. W/LD. Green, Cs. 20	.....	134.00
6832A17	FLIPPER JR. W/LD. Orange	.....	6.70
6832A19	FLIPPER JR. W/LD. Orange, Cs. 20	.....	134.00
6832A21	FLIPPER JR. W/LD. Pink	.....	6.70
6832A23	FLIPPER JR. W/LD. Pink, Cs. 20	.....	134.00
6832A25	FLIPPER JR. W/LD. Yellow	.....	6.70
6832A27	FLIPPER JR. W/LD. Yellow, Cs. 20	.....	134.00



AWARENESS TECHNOLOGY

STAT FAX[®] MICROPLATE READERS



6880G03

- Fully automatic
- Bichromatic optics
- Parallel and serial outputs (serial cable included)

Stat Fax Microplate Readers feature on board data reduction calculations which include regressions, curve fitting and cutoff absorbance calculations with step-by-step user prompting. Thomas number 6880G03 has a large, non-volatile memory that stores at least 50 user-entered tests and operates with or without a computer. A bi-directional interface is available as an accessory for linking to an IBM type computer. Thomas number 6880G05 can store over 100 user-entered tests and features a graphic LCD screen.

SPECIFICATIONS

Thomas Number	6880G03	6880G05
Model	2100	3000

Photometric	
Linear Measurement Range:	-0.20 to 3.0 Absorbance units (A)
Photometric Accuracy:	±1% or better
Stability:	Drift of no more than 0.005A in 8 hours
Light Source:	Tungsten lamp with lamp-saver feature
Wavelengths:	Standard: 405, 450, 492 and 630 nm; 6-VIS: 405, 450, 492, 545, 600 and 630 nm; 8-UV: 345, 395, 480, 490, 545 and 630 nm
Filter Type:	Multiple cavity hard coat interference, 10 nm half bandpass
Filters:	405, 450, 492 and 630 nm visible wavelength
Vessel:	Standard 96 well microtiter plates or strip trays

Electronic		
Display:	Two line LCD, alpha numeric, 24 characters per line	128 x 64 pixel, graphic LCD
Printer Requirements:	Parallel or serial, 80 Columns, 2K byte minimum buffer capacity, Epson [®] compatible	
Keyboard:	29-key, domed membrane switch, annunciating	
Power Requirements:	115 V or 230 V AC, 50-60 Hz (switch selectable)	
Serial Port:	2400 Baud, 1 start bit, 8 data, 1 stop, no parity	9600 Baud, 1 start bit, 8 data, 1 stop, no parity
Microprocessor:	Z80A or Z180	Z180
Non-volatile Memory:	Battery supported RAM, holds approx. 50 tests and curves	Battery supported RAM, holds more than 100 tests and curves
Certifications:	ETL Listed, CE Mark	

Software	
Speed:	Reads and prints absorbances of 96 wells in about two minutes
Calculation Modes:	Single point calibration, uptake mode, point-to-point curve fit, polynomial regression, linear regression (log & linear), cutoff absorbance, multipoint % absorbance
Additional Features:	Complete user prompting, flags and error messages, partial plate reading, alphanumeric test naming, automatic interpretation options, duplicate options, clock and calendar, controls, locator, self check system, curve plotting and editing

Other	
Mixer:	Variable time, fixed speed
Enclosure:	Fire-retardant ABS plastic cover with metal base
Dimensions:	Approx 17 x 14.5 x 7" (43 x 37 x 18 cm), 30 lbs (13.7 kg)

* Models with six visible wavelengths or one UV and five visible wavelengths are available on special order

6880G03	MICROPLATE READER 2100	.....	\$3,940.00
6880G05	MICROPLATE READER 3000	.....	4,698.00

GLASS MORTARS AND PESTLES

- With spout
- Capacity indicated in listings



6881G10

MORTARS AND PESTLES

CAPACITY, oz.:	2	4	8	16
I.D., mm:	73	89	95	127

6881G10	MORTAR AND PESTLE, 2 oz.	\$12.65
6881G15	MORTAR AND PESTLE, 4 oz.	12.10
6881G20	MORTAR AND PESTLE, 8 oz.	15.60
6881G25	MORTAR AND PESTLE, 16 oz.	17.10

COORS

PORCELAIN MORTARS AND PESTLES

Standard Depth Mortars

- Mortars with spout
- Glazed outside
- Inside grinding surface unglazed

Mortars and pestles are sold separately. Mortar dimensions (outside diameter x height) are noted in listings.



6882E10

Mortars Only

6882E10	MORTAR, 50 mL, 60310, 70 x 47 mm.	\$10.74
6882E11	MORTAR, 50 mL, 60310, 70 x 47 mm, Cx. 18.	165.32
6882E15	MORTAR, 65 mL, 60313, 80 x 53 mm.	11.97
6882E17	MORTAR, 65 mL, 60313, 80 x 53 mm, Cx. 18.	215.46
6882E22	MORTAR, 145 mL, 60316, 90 x 70 mm.	15.60
6882E24	MORTAR, 145 mL, 60316, 90 x 70 mm, Cx. 12.	189.60
6882E28	MORTAR, 275 mL, 60319, 115 x 70 mm.	20.09
6882E30	MORTAR, 275 mL, 60319, 115 x 70 mm, Cx. 8.	160.72
6882E34	MORTAR, 400 mL, 60322, 130 x 80 mm.	29.28
6882E36	MORTAR, 400 mL, 60322, 130 x 80 mm, Cx. 8.	294.24
6882E40	MORTAR, 750 mL, 60325, 163 x 110 mm.	42.04
6882E42	MORTAR, 750 mL, 60325, 163 x 110 mm, Cx. 4.	166.16
6882E46	MORTAR, 1,300 mL, 60328, 216 x 130 mm.	119.92
6882E48	MORTAR, 1,300 mL, 60328, 216 x 130 mm, Cx. 2.	259.94
6882E52	MORTAR, 4,000 mL, 60381, 163 x 150 mm.	197.69

COORS

PORCELAIN MORTARS AND PESTLES

Pestles with unglazed end



6882F10

- Glazed handle
- Unglazed grinding end

Pestle lengths are noted in listings.

Pestles Only

6882F10	PESTLE, 50 mL, 60311, 110 mm.	\$11.74
6882F11	PESTLE, 50 mL, 60311, 110 mm, Cx. 18.	211.32
6882F16	PESTLE, 65 mL, 60314, 130 mm.	12.47
6882F18	PESTLE, 65 mL, 60314, 130 mm, Cx. 18.	224.46
6882F22	PESTLE, 145 mL, 60317, 135 mm.	13.77
6882F24	PESTLE, 145 mL, 60317, 135 mm, Cx. 12.	165.24
6882F28	PESTLE, 275 mL, 60320, 170 mm.	15.50
6882F30	PESTLE, 275 mL, 60320, 170 mm, Cx. 8.	124.46
6882F34	PESTLE, 400 mL, 60323, 190 mm.	19.99
6882F36	PESTLE, 400 mL, 60323, 190 mm, Cx. 8.	193.90
6882F40	PESTLE, 750 mL, 60326, 220 mm.	31.16
6882F42	PESTLE, 750 mL, 60326, 220 mm, Cx. 4.	134.64
6882F46	PESTLE, 1,300 mL, 60329, 240 mm.	56.61
6882F48	PESTLE, 1,300 mL, 60329, 240 mm, Cx. 2.	113.22
6882F52	PESTLE, 4,000 mL, 60332, 260 mm.	70.25

MORTARS AND PESTLES

Plattner Diamond

- Hardened alloy tool steel, for crushing hard, brittle materials such as ores, minerals, etc.
- Mortar 76 mm diameter x 25 mm high
- Cavity 30 mm diameter x 9.5 mm deep, fitted with precisely machined, removable sleeve for holding crushed material in cavity
- Pestle 76 mm long x 25 mm diameter; fits securely inside sleeve



6883L10

6883L10	MORTAR AND PESTLE, Plattner Diamond.	\$181.05
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MORTARS AND PESTLES

Agate



- Polished
- Mortar and pestle both agate
- Sizes shown are outside width

Octagonal-shaped, thick-wall agate. Mortar and pestles sold as sets only.

6883N10

6883N10	MORTAR AND PESTLE, 25 mm	\$89.85
6883N15	MORTAR AND PESTLE, 35 mm	90.00
6883N20	MORTAR AND PESTLE, 50 mm	90.35
6883N30	MORTAR AND PESTLE, 75 mm	159.05
6883N35	MORTAR AND PESTLE, 100 mm	309.85

COORS

MORTARS AND PESTLES, ALUMINA



- Mortars are glazed outside and polished on inside
- Made of a very high alumina composition which is harder than agate
- Mortar and pestle shaped for easy holding

Grinding surface cannot be scratched with tungsten carbide scribe and only slightly with a diamond. Pestle, sold separately, is of alumina, with polished grinding end. Use of 99.5% Alumina composition results in minimum sample contamination. Extremely hard (9 on Mohs Scale) and completely non absorbent.

6884H0 and .A07

Grinding surface cannot be scratched with tungsten carbide scribe and only slightly with a diamond. Pestle, sold separately, is of alumina, with polished grinding end. Use of 99.5% Alumina composition results in minimum sample contamination. Extremely hard (9 on Mohs Scale) and completely non absorbent.

Mortars Only

6884H10	MORTAR, 35 mm	\$45.21
6884H13	MORTAR, 35 mm, Co. 4	160.64
6884H16	MORTAR, 50 mm	48.13
6884H19	MORTAR, 50 mm, Co. 3	144.29
6884H22	MORTAR, 65 mm	58.75
6884H25	MORTAR, 65 mm, Co. 2	117.56
6884H30	MORTAR, 75 mm	60.90
6884H40	MORTAR, 100 mm	138.92
6884H46	MORTAR, 120 mm	181.54

Pestles Only

6884J10	PESTLE, 36 mm	\$21.48
6884J13	PESTLE, 36 mm, Co. 4	85.96
6884J16	PESTLE, 57 mm	25.47
6884J19	PESTLE, 57 mm, Co. 3	76.41
6884J22	PESTLE, 65 mm	30.61
6884J25	PESTLE, 65 mm, Co. 2	61.22
6884J30	PESTLE, 74 mm	40.86
6884J40	PESTLE, 100 mm	61.75
6884J46	PESTLE, 117 mm	67.23

NUNC

MULTIWELL DISHES

Rectangular wells, Nunclon[®] Δ , treated for all areas of cell culture, including scale-up and cloning



- Offer larger surface area
- Radiation sterilized

Intended primarily for techniques requiring surface attachment or for applications where cells are to be grown on cover slips inside the wells. Special treatment provides the ideal surface for the successful attachment and growth of cells. The 4-well plates have a

6900A01, A05, A07, A09, A13, A19

surface area of 16 cm² per cell and a working volume of 3.5 to 8 mL/well. The 8-well plate has surface area of 8.6 cm² per cell and a working volume of 2.0 to 4.5 mL/well.

6900A01	MULTIWELL, 4-well, Pl. 10	\$19.36
6900A03	MULTIWELL, 4-well, Co. 100	174.20
6900A05	MULTIWELL, 6-well, Co. 100	174.85

Roundwell, 4-Well, Nunclon[®] Δ Treated

- Sterilized by gamma radiation
- Clear polystyrene, with four flat-bottom wells treated for improved cell attachment and growth
- Wells are 15 mm diameter x 11 mm deep; 0.4-1.0 mL working volume per well; culture area 1.9 cm²

6900A07

- Numerical designations on plate and cover aid in proper positioning so as to avoid contamination
- Cover design allows constant air flow; assembly can be sealed with tape for anaerobic applications

Special treatment provides the ideal surface for the successful attachment and growth of cells. Overall dimensions 66 x 66 mm. Packaged in sleeves of four, with cover in place; case contains 30 sleeves; tape not included. For sterile sealing tape, order 6980A35.

6900A07	TISSUE CULTURE PLATE, Co. 120	\$178.75
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(continued on next page)

NUNC

MULTIWELL DISHES

Roundwell, 6-Well, Nunclon[®] Δ Treated

6900A09

- Lid rings to reduce evaporation on 6, 12, 24 and 48 well plates
- Sterilized by gamma radiation
- Clear polystyrene
- Stackable
- Frosted areas for marking

Six, flat-bottom wells are treated for improved cell attachment and growth. Wells have number designations and are completely separated to prevent cross-contamination of samples. Reservoir between wells can be filled with water to reduce evaporation of media. Notches on cover and plate ensure proper positioning of cover. Cover design allows constant air flow or assembly can be sealed with tape for anaerobic applications. Special treatment provides the ideal surface for the successful attachment and growth of cells.

Well dimensions: 35 mm diameter at top x 17.3 mm deep; capacity 16.5 mL; culture area 9.6 cm². Overall dimensions: 88 x 132 mm. 6900A09 Tissue Culture Plates are individually wrapped, with covers; 6900A11 Tissue Culture Plates are packaged in sleeves of five, with cover in place; case contains 17 sleeves.

6900A09	MULTI-DISH CULTURE PLATE, 6-Well, Cx. 75	.....	\$137.23
6900A11	MULTI-DISH CULTURE PLATE, 6-Well, Cx. 85	.....	156.26

Roundwell, 12-Well, Nunclon[®] Δ Treated

- Similar to 6900A09 and A11, but have 12 wells
- Wells have letter and number designations
- Dimensions: 21.6 mm diameter at top x 19.3 mm deep
- Working well volume: 0.7 to 1.8 mL/well
- Culture area 3.66 cm²

Plates are individually wrapped and include covers. Special treatment provides the ideal surface for the successful attachment and growth of cells.



6900A13

6900A13	MULTI-DISH CULTURE PLATE, 12-Well, Cx. 75	\$151.53
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Roundwell, 24-Well, Nunclon[®] Δ Treated

6900A15

- Similar to 6900A09 and A11, but have 24 wells
- Wells have letter and number designations
- Dimensions: 16.2 mm diameter at top x 17.3 mm deep
- Working well volume: 0.4 to 1.0 mL/well
- Culture area: 2.0 cm²

Special treatment provides the ideal surface for the successful attachment and growth of cells.

6900A15 Tissue Culture Plate individually wrapped, with cover.

6900A17 Tissue Culture Plate packaged in sleeves of five, with cover in place; case contains 17 sleeves.

6900A15	MULTI-DISH CULTURE PLATE, 24-Well, Cx. 75	.....	\$172.16
6900A17	MULTI-DISH CULTURE PLATE, 24-Well, Cx. 85	.....	189.92

Roundwell, 48-Well, Nunclon[®] Δ Treated

- Similar to 6900A09 and A11, but have 48 wells
- Wells have letter and number designations
- Dimensions: 12.4 mm diameter at top x 19.1 mm deep
- Working well volume: 0.3 to 0.6 mL/well
- Culture area: 1.21 cm²



6900A19

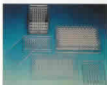
Plates are individually wrapped and include cover. Special treatment provides the ideal surface for the successful attachment and growth of cells.

6900A19	MULTI-DISH CULTURE PLATE, 48-Well, Cx. 75	\$194.75
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NUNC

TISSUE CULTURE PLATES

*Terasaki Format, Sterile, Disposable, Nunclon[®] Δ
Microwell Plate*



6900A21

- Sterilized by gamma radiation
- Of clear polystyrene, with wells treated for improved cell attachment and growth
- Working temperature range -40° to +75°C
- 1.9 mm deep, V-wells, 0.5 mm thick; capacity 10 μ L

Raised rims around wells prevent cross-contamination.

Rows have letter and number designations. Flanges on cover and plate ensure proper orientation of cover. Special treatment provides the ideal surface for the successful attachment and growth of cells.

Overall dimensions: 56 x 82 mm. Suitable for single-cell cloning techniques, transplantation antigen assays (HL-A tissue typing) involving microdroplet lymphocyte procedures, etc. 6900A21 Tissue Culture Plate has 60 wells. 6900A23 Tissue Culture Plate has 72 wells. Furnished with covers in sleeves of ten.

6900A21	TISSUE CULTURE PLATE, 60-Well, Cx. 150	.....	\$210.16
6900A23	TISSUE CULTURE PLATE, 72-Well, Cx. 150	.....	196.01

CORNING

CELL CULTURE CLUSTERS

Compatible with most automatic dilutors, pipettors and centrifuges, plate readers and washers



6901A01 series

- Alphanumeric markings aid in well identification
- Stacking beads and uniform footprints for easier handling
- One-way lid fit for non-reversible operations
- Certified non-pyrogenic

Corning Cell Culture Clusters are manufactured from optically clear virgin polystyrene and are treated for optimal cell attachment. Features include lids with individual condensation rings to reduce well-to-well contamination and serrations on plate flange/skirt to easily distinguish from lid when handling stacks of clusters.

Packaged individually or as pack of 5 in cases of 50 or 100. Also available in 96-well format. See 6906A01 series.

6901A01	CULTURE PLATE, 6 Well x 34.8 mm, Pk. 5, Cx. 100	.....	\$166.62
6901A03	CULTURE PLATE, 6 Well x 34.8 mm, Individually Wrapped, Cx. 50	.....	86.03
6901A05	CULTURE PLATE, 12 Well x 22.1 mm, Pk. 5, Cx. 100	.....	195.00
6901A07	CULTURE PLATE, 12 Well x 22.1 mm, Individually Wrapped, Cx. 50	.....	99.79
6901A09	CULTURE PLATE, 24 Well x 15.6 mm, Individually Wrapped, Cx. 100	.....	217.94
6901A11	CULTURE PLATE, 24 Well x 15.6 mm, Individually Wrapped, Cx. 50	.....	106.97
6901A13	CULTURE PLATE, 48 Well x 10.2 mm, Individually Wrapped, Cx. 100	.....	256.94

BD BIOSCIENCES

FALCON[®] MULTIWELL PLATES
FOR CELL CULTURE

6923A01 series

- Cylindrical, flat-bottom plates
- Alpha-numeric well identification
- Gamma irradiation sterilized
- Crystal-grade polystyrene
- Non-pyrogenic
- Lot-to-lot testing for consistent results
- Provide a consistent culture surface chemistry by using a vacuum gas-plasma treatment
- Individual and bulk packaging
- Footprint: 86 x 128 mm

Select from non-treated polystyrene or standard tissue culture (TC) or BD Primaria[™] treatment. Non-treated plates have a more hydrophobic surface for reduced cell attachment. A vacuum-gas plasma tissue culture treatment provides an enhanced culture surface for the standard TC line. This permanent modification incorporates negatively charged functional groups that create a hydrophilic surface for cell attachment. Primaria treatment increases nitrogen containing groups for additional cell attachment and spreading of some cell types. Suitable for viral isolation, viral susceptibility testing, microplaque technique, cloning studies, replicate studies, etc.

Alphanumeric labeling of wells and one way lid facilitate plate handling. Deep wells, a low profile labyrinth lid and condensation rings minimize evaporation and edge effect. Panels have serration for secure grip and writing patch for easy labeling. The supplied cover has individual condensation rings above each well and a one-way fit which reduces the chance of cross contamination. Also available in ready-stack tray packs.

(continued on next page)

BD BIOSCIENCES

FALCON™ MULTIWELL PLATES FOR CELL CULTURE

Standard Tissue Culture Plates

A. 6-Well Plates

- Well dimensions: 35 dia. x 18 deep mm; thickness: 1.62 mm
- Total volume per well: 15.5 mL; growth area per well: 9.6 cm²

Model 6902A01 plates are individually wrapped in a case of 50; Model 6902A03 plates are bulk packaged in bags of six in a case of 36.

6902A01	TISSUE CULTURE PLATE, 6-Well, w/Lid, Cs. 50	\$91.60
6902A03	TISSUE CULTURE PLATE, 6-Well, w/Lid, Cs. 36	66.90

B. 12-Well Plates

- Well dimensions: 22 dia. x 18 deep mm; thickness: 1.52 mm
- Total volume per well: 6.0 mL; Growth area per well: 3.8 cm²

Model 6902A05 plates are individually wrapped in a case of 50; Model 6902A07 plates are bulk packaged in bags of six in a case of 36.

6902A05	TISSUE CULTURE PLATE, 12-Well, w/Lid, Cs. 50	\$109.20
6902A07	TISSUE CULTURE PLATE, 12-Well, w/Lid, Cs. 36	78.30

C. 24-Well Plates

- Well dimensions: 15.5 dia. x 18 deep mm; thickness: 1.39 mm
- Total volume per well: 3.5 mL; Growth area per well: 2.0 cm²

Model 6902A09 plates are individually wrapped in a case of 50; Model 6902A11 plates are bulk packaged in bags of six in a case of 36.

6902A09	TISSUE CULTURE PLATE, 24-Well, w/Lid, Cs. 50	\$117.10
6902A11	TISSUE CULTURE PLATE, 24-Well, w/Lid, Cs. 36	87.10

D. 48-Well Plates

- Well dimensions: 9.8 dia. x 18 deep mm; thickness: 1.39 mm
- Total volume per well: 1.4 mL; Growth area per well: 0.75 cm²

Model 6902A13 plates are individually wrapped in a case of 50; Model 6902A15 plates are bulk packaged in bags of six in a case of 36.

6902A13	TISSUE CULTURE PLATE, 48-Well, w/Lid, Cs. 50	\$139.80
6902A15	TISSUE CULTURE PLATE, 48-Well, w/Lid, Cs. 36	100.90

Primaria™ Tissue Culture Surface Multiwell Plates

Provide a unique alternative to the traditional tissue culture treated surface. The cell culture substrate has been modified to incorporate both oxygen and nitrogen containing functional groups into the chemistry of the polystyrene surface. Used to grow a variety of primary cells and cell lines that would attach to or grow poorly on conventional, negatively charged surfaces. Individually packed in cases of 50. Lids are included.

A. 6-Well Plates

- Well dimensions: 35 mm dia. x 18 mm deep; thickness: 1.62 mm
- Total volume per well: 15.5 mL
- Growth area per well: 9.6 cm²
- Plate height: 20 mm

6902C01	CULTURE PLATE, 6-Well, Primaria, w/Lid, Cs. 50	\$116.00
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B. 24-Well Plates

- Well dimensions: 15.5 mm dia. x 18 mm deep; thickness: 1.39 mm
- Total volume per well: 3.5 mL
- Growth area per well: 2.0 cm²
- Plate height: 20 mm

6902C03	CULTURE PLATE, 24-Well, Primaria, w/Lid, Cs. 50	\$148.40
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C. 96-Well Plates

- Well dimensions: 6.35 mm dia. x 10.76 mm deep; thickness: 1.11 mm
- Total volume per well: 0.37 mL
- Growth area per well: 0.32 cm²
- Plate height: 14 mm

6902C05	TISSUE CULTURE PLATE, 96-Well, Primaria, w/Lid, Cs. 50	\$201.80
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BD BIOSCIENCES

FALCON® MULTIWELL PLATES FOR CELL CULTURE (continued)

Non-Treated Tissue Culture Multiwell Plates



6902001 series

- 6, 12, 24, 48 or 96 well, disposable
- Low evaporation lid
- Alpha-numeric well identification
- Gamma irradiation sterilized
- Constructed of clear polystyrene, 86 x 128 mm

Have an increased hydrophobic growth surface for reduced cell attachment. Similar to the surface of a bacteriological petri dish. Individually packed in cases of 50.

A. 6-Well Plates

- Cylindrical, flat bottom wells
- Well dimensions: 35 dia. x 18 deep mm; thickness: 1.62 mm
- Total volume per well: 15.5 mL
- Growth area per well: 9.6 cm²
- Plate height: 20 mm

6902001 CULTURE PLATE, 6-Well, Non-Treated, Co. 50 \$91.99

B. 12-Well Plates

- Cylindrical, flat bottom wells
- Well dimensions: 22 dia. x 18 deep mm; thickness: 1.52 mm
- Total volume per well: 6.0 mL
- Growth area per well: 3.8 cm²
- Plate height: 20 mm

6902003 CULTURE PLATE, 12-Well, Non-Treated, Co. 50 \$109.20

C. 24-Well Plates

- Cylindrical, flat bottom wells
- Well dimensions: 15.5 mm dia. x 18 mm deep; thickness: 1.39 mm
- Total volume per well: 3.5 mL
- Growth area per well: 2.0 cm²
- Plate height: 20 mm

6902005 CULTURE PLATE, 24-Well, Non-Treated, Co. 50 \$117.19

D. 48-Well Plates

- Cylindrical, flat bottom wells
- Well dimensions: 9.8 dia. x 18 deep mm; thickness: 1.39 mm
- Total volume per well: 1.4 mL
- Growth area per well: 0.75 cm²
- Plate height: 20 mm

6902007 CULTURE PLATE, 48-Well, Non-Treated, Co. 50 \$139.50

E. 96-Well Plates

- Cylindrical wells
- Well dimensions: 6.35 dia. x 10.76 deep mm
- Total volume per well: 0.32 mL/U-bottom, 0.37 mL/flat bottom
- Growth area per well: 0.36 cm²/U-bottom, 0.32 cm²/flat bottom
- Plate height: 14 mm
- Model 6902009 plates have U-bottoms and are 1.14 mm thick
- Model 6902011 plates have Flat bottoms and are 1.11 mm thick

6902009 CULTURE PLATE, 96-Well, U-Bottom, Co. 50 \$136.00

6902011 CULTURE PLATE, 96-Well, Flat-Bottom, Co. 50 122.00

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your next order!

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LINBRO® MULTIWELL CULTURE PLATES

Flat-bottom, 4-well dish for growing multiple cell lines under uniform conditions

- Sterile (gamma irradiated)
- Four 60 x 15 mm disposable dishes molded in on clear polystyrene tray



6903A01

Plates are useful for plating, cloning, virus isolation, inhibition studies, clinical bacteriology, etc.

Interior treated for improved cell attachment and growth. Plate skirt extends below dish bottoms to prevent scratching and to permit stacking. Wells are numbered 1 to 4 with one corner of the cover marked 1 for proper positioning.

Injection molded plates are constructed of optically clear polystyrene under strict conditions to ensure quality and performance. Lot tested for consistent results. Growth area: 28.2 cm². Well capacity: 42.4 mL. Overall dimensions: 142 mm square x 20 mm high, with central well that seats ring on cover. Case of 100 contains 20 bags of 5 trays complete with fitted covers.

6903A01 MULTI-DISH, 4 Wells, 60 x 15 mm, Cs, 100 \$440.00

Flat-bottom, 6-well TC dish

- Similar to 6903A01, but tray has six numbered culture dishes per plate, each 35 x 10 mm
- Six clear windows permit viewing dish contents from side

Tabs on tray align with notches in cover. Growth area: 9.62 cm²; well capacity: 9.6 mL.

6903A03 MULTI-DISH, 6 Wells, 35 x 10 mm, Cs, 100 \$339.00

Flat-bottom, 24-well TC dish

- Bottom thickness 1 mm
- Nominal well capacity 3.5 mL
- Sterile; treated for improved cell attachment and growth



6904A05

Well rows are numbered 1 to 6 and lettered A to D. Skirt extends below bottom of wells to prevent scratching. Tabs engage notches in cover for proper positioning. Cover fits loosely to provide free gas exchange for CO₂ incubation.

Clear polystyrene, 108 x 150 x 22 mm high, with 24 cylindrical flat-bottom wells 16 mm diameter x 17 mm deep; suitable for viral isolation, susceptibility testing, microplaque technique, cloning studies, replicate studies, etc. Growth area: 2.0 cm². Individually wrapped, with cover.

6904A05 MULTI-DISH, 24 Wells, 16 x 17 mm, Cs, 100 \$439.00

NUNC**96-WELL TISSUE CULTURE PLATES**

Sterile, Disposable, Nunclon® Δ Microtest Plates



6905A05

- Sterilized by gamma radiation
- Working temperature range: -40° to +75°C
- Alpha-numeric well designations
- Notched ends to ensure proper orientation

Each well has a raised rim which helps prevent cross-contamination and provides attachment area for adhesive film (see Thomas number 6980A01). Clear polystyrene plates with 96 wells are treated for improved cell attachment and growth.

Model 6905A05, A07 and A09 plates have flat-bottomed wells. Wells are 7 mm top diameter x 6.4 mm bottom diameter x 11.25 mm deep; capacity 0.4 mL. Bottom of well is 1.1 mm thick. Culture area per well is 0.328 cm². Plates are individually wrapped and 6905A05 and A07 plates include covers.

Model 6905A11 and A13 plates have round-bottomed wells. Wells are 7 mm diameter x 10.3 mm deep; capacity 0.3 mL. Bottom of well is 1.2 mm thick. Culture area per well is 0.36 cm². Top of plate is frosted to provide improved well visibility and reduced light reflection. Plates are individually wrapped and 6905A13 plates include covers.

6905A05 TISSUE CULTURE PLATE, Flat-Bottom, Cs, 50 \$153.24

6905A07 TISSUE CULTURE PLATE, Flat-Bottom, Cs, 100 365.09

6905A09 TISSUE CULTURE PLATE, Flat-Bottom, No Lid, Cs, 50 106.89

6905A11 TISSUE CULTURE PLATE, Round-Bottom, No Lid, Cs, 50 120.64

6905A13 TISSUE CULTURE PLATE, Round-Bottom, Cs, 50 170.02



Thomas Tips

Choosing the Right Surface Treatment

Be sure to choose the right surface treatment for your assay. Specially treated and coated plates exist for immobilizing proteins, non-protein antigens, peptides, biotin and more, or to minimize binding of these entities.

CORNING

96 WELL CELL CULTURE CLUSTERS

Compatible with most automatic dilutors, pipettors and centrifuges, plate readers and washers



6906A01 series

- Alphanumeric markings aid in well identification
- Stacking beads and uniform footprints for easier handling
- Uniform footprint

Corning® 96 Well Cell Culture Clusters are treated for optimal cell attachment

and sterilized by gamma radiation. Culture clusters are certified non-pyrogenic. Most come with one way lid and individual condensation rings. Packaged individually in cases of 50 or 100 or as noted. 6906A01 and A05 are fitted with special low evaporation lids, 6906A03 come without lid. 6906A15 is a non-treated half area plate with reduced well diameters but the same 9 mm well-to-well spacing and half the growth area of the regular plates (0.16 cm² versus 0.32 cm²). 6906A21 has slightly more growth area (0.38 cm²). 6906A23 are 8-well strips assembled 12 strips per plate.

6906A01	CULTURE PLATE, Flat, Low Evap. Lid, Pk. 5, Cs. 50	\$143.94
6906A03	CULTURE PLATE, Flat, w/o Lid, Individually Wrapped, Cs. 100	191.17
6906A05	CULTURE PLATE, Flat, Low Evap. Lid, Individually Wrapped, Cs. 50	143.85
6906A07	CULTURE PLATE, Flat, Individually Wrapped, Cs. 50	136.84
6906A09	CULTURE PLATE, Flat, Pk. 5, Cs. 100	247.40
6906A11	CULTURE PLATE, Flat, Pk. 10, Cs. 50	127.07
6906A13	CULTURE PLATE, Flat, Individually Wrapped, Cs. 100	269.89
6906A15	CULTURE PLATE, Half Area, Non-Treated, Individually Wrapped, Cs. 50	157.89
6906A17	CULTURE PLATE, Round, Polypropylene, Non-Treated, Individually Wrapped, Cs. 50	164.19
6906A19	CULTURE PLATE, Round, Individually Wrapped, Cs. 50	159.56
6906A21	CULTURE PLATE, V-Bottom, Individually Wrapped, Cs. 50	190.81
6906A23	CULTURE PLATE, Flat, 8-Well Strip, 12/Plate, Individ. Wrap, Cs. 50	232.79

Ultra Low Binding Plates

- Non-cytotoxic
- Biologically inert
- Gamma irradiation sterilized
- Non-degradable

Ultra-low attachment plates feature a covalently bound hydrogel layer that inhibits cellular attachment minimizing protein absorption, enzyme and cellular activation.

6906A25	LOW ATTACHMENT PLATE, 6 Well x 35 mm, Cs 24	\$260.60
6906A27	LOW ATTACHMENT PLATE, 24 Well x 16 mm, Cs 24	285.55
6906A29	LOW ATTACHMENT PLATE, 96 Well x 6 mm, Cs 24	264.20

CORNING

384 AND 1536 WELL ASSAY PLATES

For high throughput screening



6906F01 series

- Solid polystyrene
- Automation-friendly 96-well footprint
- Reduces total working volume up to 90%
- Compatible with all leading 384 well readers and detectors

Come with either a tissue-culture-treated surface for cell-based assays or a non-treated

surface for solution-based homogenous assays. A high-binding surface for solid phase immobilization assays is available. Volume 384 well: 125 µL; 1536 well: 2.3 µL.

384 Tissue Culture Treated Surface (sterile with lid)

6906F01	ASSAY PLATE, Clear, Cs 100	\$349.44
6906F05	ASSAY PLATE, White, Cs 100	469.55
6906F11	ASSAY PLATE, Black, Cs 100	436.80

384 Non-treated Surface (non-sterile without lid)

6906F25	ASSAY PLATE, Clear, Cs 100	\$305.76
6906F30	ASSAY PLATE, White, Cs 100	382.20
6906F35	ASSAY PLATE, Black, Cs 100	349.44

1536 Tissue Culture Treated Surface (sterile without lid)

- Round flat-bottom wells
- Center-to-center well spacing is 2.25 mm
- Especially used for enzymatic and receptor-ligand assays

1536 well plates represent the leading edge in assay miniaturization. Demarcated in an 8 x 12 array with each square containing sixteen wells. 8 extra wells for controls. Total well volume is 2.3 µL. Plates are individually wrapped.

6906G01	ASSAY PLATE, Clear, Cs 20	\$416.00
6906G05	ASSAY PLATE, Black, Cs 20	416.00
6906G10	ASSAY PLATE, White, Cs 20	416.00

1536 Non-Treated (non-sterile without lid)

- Similar to 6906G01 through G10 except surface is non-treated
- Packaged five per sleeve, four sleeves per case

6906G25	ASSAY PLATE, Clear, Cs 20	\$374.40
6906G30	ASSAY PLATE, Black, Cs 20	374.40
6906G35	ASSAY PLATE, White, Cs 20	374.40

BD BIOSCIENCES

FALCON™ TISSUE CULTURE SURFACE MICROTEST™ MICROWELL PLATES

96-Well, Disposable

- Alpha-numeric well identification
- Gamma irradiation sterilized
- Individual or bulk pool open packaging styles
- Dimensions:
86 x 128 x 14 mm



6907A01

Useful for tissue culture techniques. All plates supplied with low evaporation lids except 6907A07. Lids are also available separately (6907A15).

Sealing film (6907A18) provides a positive seal of each individual well. Furnished as strips of clear, pressure-sensitive film which covers the entire plate surface. Strips are non-sterile and individually wrapped.

Flat Bottom Wells

- Well dimensions (mm): 6 dia. x 10 deep; thickness: 1.11 mm
- Total volume per well: 0.37 mL
- Growth area per well: 0.32 cm²

Models 6907A01, A03 and A07 are constructed of clear polystyrene for improved cell attachment and growth. Model 6907A01 plates are individually wrapped in a case of 50. Model 6907A03 plates are bulk packaged in bags of five in a case of 50. Model 6907A05 plates are opaque, white plates used for cell-based fluorescent, bioluminescent and chemiluminescent assays. Designed for low well-to-well cross-talk and exceptionally low background. Packaged in bags of ten.

6907A01	TISSUE CULTURE PLATE, Flat Bottom, Clear, Microtest, Cx. 50	.....	\$147.00
6907A03	TISSUE CULTURE PLATE, Flat Bottom, Clear, Microtest, Cx. 50	.....	136.00
6907A05	TISSUE CULTURE PLATE, Flat Bottom, White, Microtest, Cx. 50	.....	125.00
6907A07	TISSUE CULTURE PLATE, No Lid, Flat Bottom, Clear, Microtest, Cx. 50	.....	113.00
6907A15	LID, Cx. 50	.....	35.00
6907A18	SEALING FILM, Cx. 200	.....	147.00

U-Bottom Wells

- Well dimensions (mm): 6 dia. x 10 deep; thickness: 1.14mm
- Total volume per well: 0.32 mL
- Growth area per well: 0.36cm²

Constructed of clear polystyrene for improved cell attachment and growth. Model 6907B01 plates are individually wrapped in a case of 50 but do not include lids. Model 6907B03 plates are individually wrapped in a case of 50. Model 6907B05 plates are bulk packaged in bags of five in a case of 50.

6907B01	TISSUE CULTURE PLATE, No Lid, U-Bottom, Microtest, Cx. 50	.....	\$113.00
6907B03	TISSUE CULTURE PLATE, U-Bottom, Microtest, Cx. 50	.....	131.00
6907B05	TISSUE CULTURE PLATE, U-Bottom, Microtest, Cx. 50	.....	133.00

LINBR0

DISPOSABLE 96-WELL MICROPLATES

Sterile



6908C01

- Clear polystyrene, 128 x 86 x 15 mm high, with 96 wells
- Rows are numbered 1 to 12 and lettered A to H
- Useful for drug toxicity assays, viral infectivity in cell mono layers, interferon production assays, etc.
- Ergonomically stackable

6908A01 Plate has flat bottom wells 6.7 mm diameter x 10 mm deep, nominal working capacity 0.35 mL per well.

6908A03 "Lightweight" design plate has U-bottom wells, nominal working capacity 0.25 mL per well. Features inter-well spaces, individual well ID, gripping tabs on sides, raised well rims and control rings on lids to reduce contamination. Growth area: 0.38 cm²

Both are individually wrapped, with cover.

6908A01	TISSUE CULTURE TREATED PLATE, Flat Well, Cx. 100	.....	\$454.00
6908A03	LIGHTWEIGHT T.C. PLATE, U-Bottom Well, Cx. 100	.....	481.00

Non-sterile

- Similar to above

Made of clear polystyrene, 128 x 86 x 15 mm, with 96 cylindrical wells, 6.7 mm diameter x approximately 10 mm deep, with slightly raised rims. Wells have nominal working capacity of 0.25 mL. Rows and columns are lettered A to H and numbered 1 to 12.

6908C01	MICROPLATES, U-Bottom Wells, Cx. 100	.....	\$203.00
6908C03	MICROPLATES, V-Bottom Wells, Cx. 100	.....	194.00
6908C10	COVER, Cx. 100	.....	190.00

NUNC

96 WELL FLUORONUNC™ PLATE



6910A05 series

non-toxic white or black plate is provided with clear lid. Black plates provide minimum background in fluorescence reading with minimum back-scattered light, while white plates provide maximum reflection and minimum autofluorescence and autoluminescence. Each well has a suggested working volume of 0.2 mL, and culture area of 0.33 cm².

- Minimum cross-talk
- Nunclon® certified surface ensures cell attachment and growth
- 96 well footprint is compatible with standard equipment

Sterile polystyrene 96 MicroWell® Plates are ideal for fluorescence-based cell assays. The raised well rims reduce the risk of cross-contamination. Each

6910A05	CULTURE PLATE, White, 96 Well, 10 per Sleeve, Co. 100	.....	\$405.78
6910A06	CULTURE PLATE, White, 96 Well, 1 per Sleeve, Co. 50	.....	159.18
6910A10	CULTURE PLATE, Black, 96 Well, 1 per Sleeve, Co. 50	.....	148.04
6910A15	CULTURE PLATE, Black, 96 Well, 10 per Sleeve, Co. 100	.....	433.17

NUNC

384 WELL PLATES FOR CELL CULTURE

Same footprint as 96 well plates with 4 times as many wells



6910C00 series

charged and ideal for adherent cells. White plates are for luminescent/fluorescent applications. Clear plates are for colorimetric and storage applications. Black plates are for fluorescent applications. Dimensions: 86 x 128 mm. Suggested working volume: 20 to 50 µL. Lids included.

- Available in white, clear or black plates
- Sterilized polystyrene
- Compatible with robotics
- Lids included

These plates allow the miniaturization of assays. Cell culture surface is negatively

6910C00	384 WELL PLATE, White, Co. 20	.....	\$142.01
6910C05	384 WELL PLATE, Clear, Co. 30	.....	306.91
6910C07	384 WELL PLATE, Black, Co. 30	.....	133.02

CORNING

SOLID BLACK AND WHITE PLATES FOR IMMUNOFLUORESCENT ASSAYS



6911A00 series

- Raised well rims
- Comes with high binding, TC-treated or non-treated surface
- Built to proposed industry standard footprint

These solid black and white, opaque polystyrene plates are tested on a lot-to-lot basis for opacity and low fluorescent/luminescent background. Plates have minimal well-to-well cross talk and low background fluorescence and/or luminescence. Plates are available with either a high binding surface, ideal for solid phase immunoassay work, a tissue-culture-treated surface for cell growth or a non-treated surface for solution-based assays. Total well volume measures 360 µL.

6911A00	CULTURE PLATE, Black, 96 Flat Bottom, TC-treated, Co. 100	.....	\$291.84
6911A05	CULTURE PLATE, White, 96 Flat Bottom, TC-treated, Co. 100	.....	294.84
6911A10	CULTURE PLATE, White, 96 Flat Bottom, Non-treated, Co. 100	.....	256.52
6911A15	CULTURE PLATE, White, 96 Flat Bottom, High Binding, Co. 100	.....	256.52
6911A20	CULTURE PLATE, Black, 96 Flat Bottom, Non-treated, Co. 100	.....	256.52
6911A25	CULTURE PLATE, Black, 96 Flat Bottom, High Binding, Co. 100	.....	256.52
6911A30	STERILE CULTURE PLATE, White, 96 Flat Bottom, TC-treated, Co. 100	.....	273.00
6911A35	STERILE CULTURE PLATE, Black, 96 Round Bot, Non-treated, Co. 100	.....	273.00
6911A40	STERILE CULTURE PLATE, Black, 96 Round Bot, Non-treated, Co. 100	.....	256.52

How to Find Products in This Catalog

*By product -*

Products listed are in alphabetical and numerical order.

By manufacturer number -

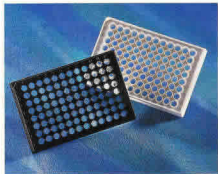
We have an extensive Cross Reference near the back of this catalog. Look for the blue pages.

By specific item, manufacturer or applications -

Please see the Index at the end of this catalog.

CORNING

96 WELL CLEAR BOTTOM PLATES



6916A00 series

- Opaque walls to prevent well to well cross talk
- Optical bottoms for direct microscopic viewing
- Plates can be used in both top and bottom reading instruments
- Built to proposed industry-standard footprint

The bottoms of these 96 well clear-bottom plates are 60% thinner than conventional polystyrene plates, resulting in lower background fluorescence and enabling readings down to 340 nm. Dense white pigment walls enhance luminescent signals and have low background luminescence and low background fluorescence. Black pigment walls have low background fluorescence and minimal light scatter.

Sterile Tissue-Culture-Treated Plates with Lid

Available in both black and white, these flat-bottom, tissue-culture-treated plates have a cell growth surface area of 0.32 cm² per well and a total well volume of 360 μ L.

6916A00	OPTICAL PLATE, 96 Well, Black, TC, Sterile, Co. 48	\$246.79
6916A02	OPTICAL PLATE, 96 Well, Black, TC, Sterile, Co. 100	502.78
6916A05	OPTICAL PLATE, 96 Well, White, TC, Sterile, Co. 48	246.79
6916A10	OPTICAL PLATE, 96 Well, White, TC, Sterile, Co. 100	502.78

Non-sterile Flat Bottom Plates without Lid

These plates have a total well volume of 360 μ L and are ideal for fluorescent/luminescent assays where visualization is preferred, but cell attachment is not required or when using bottom reading instruments. Non-treated or high binding surface treatment (black only).

6916A30	OPTICAL PLATE, 96 Well, Black, Non-treated, Non-sterile, Co. 100	\$447.72
6916A35	OPTICAL PLATE, 96 Well, White, Non-treated, Non-sterile, Co. 100	447.72
6916A40	OPTICAL PLATE, 96 Well, Black, High-binding, Non-sterile, Co. 100	447.72

NUNC

IMMUNO[®] PLATES

Nunc-Immuno[™] plates are ideal for quantitative and qualitative solid phase immunoassays

- Bold high optical quality polystyrene
- Pinch-bar design for easy grip
- Round, flat or C-bottom wells
- Automation compatible



6925A00

Available with MaxiSorp[™] or PolySorp[™] surfaces. Use MaxiSorp[™] surface with high affinity to molecules with mixed hydrophilic/hydrophobic domains and recommended for adsorption of various proteins including antibodies. Use PolySorp[™] plates, which are less polar and exhibit affinity to molecules of a more hydrophobic nature, including various types of viral antigens. MaxiSorp surface is certified for binding homogeneity. 6925A00 and 6925A15 come with certificate. Lids not included.

6925A00	ASSAY PLATE, MaxiSorp, Flat Bottom, 96 x 0.4 mL, w/Certificate, Co. 50	\$171.25
6925A05	ASSAY PLATE, MaxiSorp, Flat Bottom, 96 x 0.4 mL, Co. 60	151.47
6925A10	ASSAY PLATE, MaxiSorp, C-Bottom, 96 x 0.35 mL, Co. 60	139.81
6925A15	ASSAY PLATE, MaxiSorp, C-Bottom, 96 x 0.35 mL, w/Certificate, Co. 60	146.81
6925A20	ASSAY PLATE, PolySorp, C-Bottom, 96 x 0.35 mL, Co. 60	105.52
6925A25	ASSAY PLATE, PolySorp, Flat Bottom, 96 x 0.4 mL, Co. 60	147.59

Plates with High Flange Design for Automated Equipment

- Alphanumeric well identification
- Stackable
- Uniform reading and washing

Raised rims and lids have condensation rings to help prevent cross-contamination. These plates have the standard 96 MicroWell[®] Plate format to fit standard equipment. The high flange design facilitates automated handling of plates. Plates are available pre-labeled with bar code sequentially coded with unique numbers using code 39. Available with MaxiSorp[™] surface, which absorbs a wide range of molecules such as antibodies due to hydrophilic character, or PolySorp[™], which is less polar than MaxiSorp and suited for binding non-protein antigens. 6925A30 and A35 come with certificate attesting to the homogenous adsorption of rabbit IgG. 6925A35 and 6925A40 have barcoding. Plates come without lids. All plates hold 0.4 μ L, except for 6925A55, which holds 0.3 μ L.

6925A30	ASSAY PLATE, MaxiSorp, Flat Bottom, 96 x 0.4 mL, w/Certificate, Pk. 10/Cs. 100	\$513.33
6925A35	ASSAY PLATE, MaxiSorp, Flat Bottom, 96 x 0.4 mL, w/Certificate and Barcode, Pk. 10/Cs. 100	592.61
6925A40	ASSAY PLATE, PolySorp, Flat Bottom, 96 x 0.4 mL, w/Certificate, Pk. 10/Cs. 100	494.45
6925A45	ASSAY PLATE, PolySorp, Flat Bottom, 96 x 0.4 mL, Pk. 10/Cs. 100	440.84
6925A50	ASSAY PLATE, MaxiSorp, Round Bottom, 96 x 0.3 mL, Pk. 10/Cs. 60	146.59
6925A55	ASSAY PLATE, PolySorp, Round Bottom, 96 x 0.3 mL, Pk. 10/Cs. 60	147.36

NUNC

MICROWELL® MINI TRAYS

72 or 60 Well Mini Trays for tissue typing



6925J01 series

- Molded from virgin polystyrene, which is physically and chemically inspected to assure purity and consistency
- Wells are surface-treated for optimum mixing of reagents
- Surface has limited affinity to antibodies, ensuring that a high concentration of antibodies remains in the liquid

- Treatment process is critical and carefully controlled for uniformity and consistency

Approximate length 59 x 84 mm or 56 x 83 mm (S-plate) with wells shaped like truncated cones. Top diameter is 3.7 mm with a depth of 1.9 mm; working volume is 10 μ L. Used for serotyping, micro cytotoxicity, cell cloning studies and DNA sequencing reactions.

Low Profile Plates

- Stores more efficiently in freezers and incubators; 9 mm high with lid
- Well spacing is standard and will fit current dispensers and microscopes
- Feature large, raised alpha-numeric coordinates for easy well identification

Lids are included and have two tabs at opposite corners, so it is not necessary to orient it on the plate; lids also have raised lids, so the covered plates stack securely. Packaged 10 per sleeve.

6925J01	IMMUNO PLATE, 72 Well, Co. 100	\$107.40
6925J03	IMMUNO PLATE, 60 Well, Co. 100	107.40

S Plate

- Similar to 6925J01, but designed for stacking with or without lid in place
- When stacked without lid, each successive plate acts as dust-tight lid for plate below, which saves considerable space

Height is 11 mm with lid; a stack of 10 is 77 mm high. Lids not included. Packaged 100 per sleeve.

6925J05	S-PLATE, 60 Well, Co. 400	\$345.22
6925J07	LID, For S-Plate, Co. 400	98.28

NUNC

384 WELL PLATES

Four times more wells in the same footprint as 96 well plates



6925F01 series

- MaxiSorp™ surface
- Available in white, clear or black
- Total volume per well: 120 μ L

384 well plates allow miniaturization of assays and are compatible with robotics, automated readers and liquid handling systems. Plates are available in three colors: white for luminiscent/fluorescent applications; clear for colorimetric applications and storage; and black for fluorescent applications. Rounded square well geometry minimizes well-to-well contamination.

MaxiSorp is a polystyrene based modified surface with a high affinity for polar groups. This surface is recommended for assays in which glycoproteins such as antibodies are adsorbed to the plastic surface. Packaged 10 per sleeve.

6925F01	ASSAY PLATE, 384 Well, White, Co. 30	\$127.63
6925F05	ASSAY PLATE, 384 Well, Clear, Co. 30	102.78
6925F10	ASSAY PLATE, 384 Well, Black, Co. 30	114.35



Thomas Tips

Plate Sealing Membrane

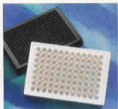
Select the optimal plate sealing membrane for your procedure. Some membranes are designed to be more chemical, temperature or light resistant than others. Gas permeable plate seals are available that prevent moisture loss while allowing breathability and may be more suitable.

BD BIOSCIENCES

FALCON® 96 WELL ASSAY PLATES

Rigid Polystyrene Plates

- For consistent assay results
- Easy-grip serrated base compatible with human and robotic hands
- Alphanumeric notation system for well identification
- One-way design lids supplied (except as noted)



6927A01 series

Injection molded from crystal-grade polystyrene for easy microscopic viewing, Falcon assay plates are available with U-bottom or flat bottom wells. For enhanced assay consistency, plates are manufactured from a well-characterized polystyrene formulation. Dimensional checks are made frequently during manufacturing. Variation in absorbance readings due to plate dimensional tolerances do not exceed a coefficient of variation (CV) of 3 percent on non-sterile flat-bottom plates. All plates have 96 x 0.30 mL well volume. Model 6927A20 plates feature "Ready-Stack Tray" Packaging. Does not include lids.

6927A01	ASSAY PLATE, Clear, Round Bottom, Non-Sterile, Co. 50	\$36.00
6927A05	ASSAY PLATE, Clear, Round Bottom, Sterile, Co. 50	\$3.00
6927A10	ASSAY PLATE, Clear, Flat Bottom, Non-sterile, Co. 50	\$3.00
6927A15	ASSAY PLATE, Clear, Flat Bottom, Non-sterile, Co. 60	\$33.00
6927A20	ASSAY PLATE, Clear, Flat Bottom, Non-sterile, Co. 84	201.00

Flexible PVC plates for analysis of individual wells

- Convenient
- Printed alphanumeric notation
- Choice of wells: U-bottom or flat bottom
- Non-sterile



6927B01 series

Falcon flexible plates are manufactured from a specially formulated polyvinyl chloride film. An optional locking one-way lid is available to minimize evaporation during long-term incubation. Individual wells can be cut out for further processing or analysis and are light enough to use in water baths. Total volume per well is 200 µL. Comes in convenient upright dispensing cartons. Does not include lids.

6927B01	FLEXIBLE PLATE, U-Bottom, Non-sterile, Pk. 25/Co. 50	\$32.00
6927B05	FLEXIBLE PLATE, Flat Bottom, Non-sterile, Pk. 25/Co. 50	\$4.00
6927B10	LID, for Flexible Plate, Non-sterile, Co. 50	\$6.00

CORNING

96 WELL ASSAY PLATES

- Clear polystyrene construction
- Choice of round, flat or V-bottom design



6928A01

These plates are ideal for solution-based assays, serial dilutions and general storage applications. Built to proposed industry standard footprint.

Each well holds from 320 to 360 µL, depending on which well geometry is selected. Choose from traditional flat bottom, round bottom or V-bottom. Models 6928A01, A03, A09 and A15 are Tissue Culture treated. Models 6928A01, A07, A09 and A11 include lid. Model 6928A21 is processed to improve hydrophobicity (i.e. Hemagglutination Assay.)

6928A01	CLEAR ASSAY PLATE, Round Bottom, w/Lid, TC Treated, Sterile, Co. 100	\$78.91
6928A03	CLEAR ASSAY PLATE, Round Bottom, TC Treated, Sterile, Co. 100	\$82.10
6928A05	CLEAR ASSAY PLATE, Round Bottom, Sterile, Co. 50	\$30.74
6928A07	CLEAR ASSAY PLATE Flat Bottom, w/Lid, Sterile, Co. 100	\$36.96
6928A09	CLEAR ASSAY PLATE, Flat Bottom, w/Lid, TC Treated, Sterile, Co. 100	\$51.16
6928A11	CLEAR ASSAY PLATE, Round Bottom, w/Lid, Sterile, Co. 100	\$39.82
6928A13	CLEAR ASSAY PLATE, Round Bottom, Sterile, Co. 100	\$35.80
6928A15	CLEAR ASSAY PLATE, Round Bottom, TC Treated, Co. 100	\$56.71
6928A17	CLEAR ASSAY PLATE, V-bottom, Sterile, Co. 48	\$36.85
6928A19	CLEAR ASSAY PLATE, V-bottom, Co. 90	\$45.00
6928A21	CLEAR ASSAY PLATE, V-bottom, Co. 90	\$56.71

CORNING

FLEXIBLE VINYL (PVC) 96 WELL PLATES

- Non-Sterile
- Round, flat or V-bottom well shape



6928A50

General assay plates are ideal for solution-based assays (i.e. Hemagglutination Assays), serial dilutions and storage applications. Each well holds 250 or 260 µL (V-bottom). Does not include lids except 6928A55.

6928A50	CLEAR ASSAY PLATE, Flat Bottom, Co. 100	\$115.49
6928A55	CLEAR ASSAY PLATE w/PVC Lid, Flat Bottom, Co. 100	\$42.07
6928A60	CLEAR ASSAY PLATE, Round Bottom, Co. 100	\$114.12
6928A65	CLEAR ASSAY PLATE, V-bottom, Co. 100	\$114.12

CORNING

ASSAY PLATES

96-Well EIA/RIA Assay Plates



6928B05 series

- Certified surface chemistry
- Ultra-low coefficient of variation (CV) for uniform binding

Designed for research and in vitro diagnostic assays, all EIA/RIA plates and strips are manufactured from a special medical grade polystyrene for uniform binding, high optical clarity and low background absorption. Certified Surface Chemistry Program guarantees protein binding performance to be within QA release specifications. High binding plates have surface binding capacity of 500 ng/cm² while medium binding plate surfaces have capacity of 250 ng/cm².

Thomas numbers 6928B30, 6928B45 and 6928B50 come with Certified Surface Chemistry. Thomas number 6928B15 comes sterile with lid. All others, lid not included. Easy wash wells have flat bottom with rounded corners. Maximum volume for all three well geometries is 0.36 mL.

6928B05	ASSAY PLATE, Clear, Medium Binding, Round Bottom, Pk. 25, Co. 100	\$17.94
6928B10	ASSAY PLATE, Clear, High Binding, Round Bottom, Individually Wrapped, Co. 100	240.24
6928B15	ASSAY PLATE w/Lid, Clear, High Binding, Flat Bottom, Sterile, Pk. 20, Co. 100	251.76
6928B20	ASSAY PLATE Clear, High Binding, Round Bottom, Pk. 25, Co. 100	229.32
6928B25	ASSAY PLATE, Clear, Medium Binding, Easy Wash, Pk. 25, Co. 100	153.80
6928B30	ASSAY PLATE w/Cell, Clear, High Binding, Easy Wash, Pk. 25, Co. 100	245.70
6928B35	ASSAY PLATE, Clear, Medium Binding, Flat Bottom, Individually Wrapped, Co. 50	117.54
6928B40	ASSAY PLATE, Clear, Medium Binding, Flat Bottom, Pk. 25, Co. 100	152.48
6928B45	ASSAY PLATE w/Cell, Clear, High Binding, Flat Bottom, Individually Wrapped, Co. 100	240.24
6928B50	ASSAY PLATE w/Cell, Clear, High Binding, Flat Bottom, Pk. 25, Co. 100	229.32

96 Well Half Area Assay Plates



6928C01 series

- Saves reagents
- Fits standard readers
- Polystyrene

Unique half-area plates achieve assay miniaturization without using 384 well plates. Half-area plates can help save on rare and expensive reagents by reducing the amount of reagent needed per well, while still retaining the ability to be read in most standard plate readers. Built to proposed industry standard footprint. All plates have wells that are untreated, treated to foster adherent cell culture or high binding. Some treatments are available in black or white for fluorescent or chemiluminescent applications.

6928C01	ASSAY PLATE, White, Half Area, Tissue Culture Treated, Co. 100	632.14
6928C03	ASSAY PLATE, Clear, Half Area, High Binding, Co. 100	245.76
6928C05	ASSAY PLATE, White, Half Area, Non-Treated, Co. 100	273.00
6928C07	ASSAY PLATE, Black, Half Area, Non-Treated, Co. 100	273.00
6928C09	ASSAY PLATE, Clear, Half Area, Non-Treated, Co. 100	240.24
6928C13	ASSAY PLATE, Clear, Half Area, Tissue Culture Treated, Co. 100	303.30



Thomas Tips

Do & Don't in Immunoassays

Do:

- Use the right surface treatment for your assay
- Check your protocol for reagent conflicts, e.g. buffer mismatches
- Check your equipment for all possible defects
- Calibrate your pipettes, and check your precision
- Store your reagents correctly
- Time the assay steps precisely
- Avoid high background by blocking after the first coating. This leaves no uncoated areas where unwanted binding can occur
- Use a heating block or waterbath to transfer heat evenly, minimizing edge effects

Don't:

- Let wells stand empty; they dry out quickly causing protein damage
- Use an automatically defrosting freezer for reagents
- Develop plates in the light, edge effects can be caused by differences in illumination
- Conduct assays in an incubator

CORNING

ASSAY PLATES

384-Well, Low Volume Assay Plates

- Polystyrene
- Meets Society for Biomolecular Screening (SBS) standards
- Increased signal-to-noise ratio

Ideal for homogeneous assays such as fluorescence polarization (FP) and scintillation proximity assay (SPA). Low volume assay plates have a maximum volume of 35 μ L and a suggested working volume range of 2 μ L to 20 μ L.

Each well has a square opening which rounds into a cone-shaped bottom. Raised rim design reduces cross-contamination during assay and liquid handling.

Available untreated or with a non-binding surface treatment (NBS). The NBS plate has a modified polymer surface (hydrophilic) to minimize bio-interaction, resulting in a 90% reduction of protein binding compared to polystyrene and polypropylene surfaces and reduced binding of RNA/DNA. The NBS can maintain enzyme activity and inhibit adhesion of a number of cell lines.



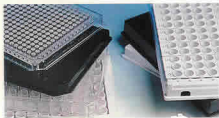
6028F50 and F55

6028F50	LOW VOLUME PLATE, Black, 384 Corical Bottom, Non-Binding, Cs. 100	\$723.00
6028F55	LOW VOLUME PLATE, Black, 384 Corical Bottom, Non-treated, Cs. 100	\$23.00

THERMO LABSYSTEMS

CLINIPLATES™

Rigid 96-well microplate for EIA



6029A25 series

- Non-sterile plates without lids
- Black and white versions available for immunoassay/fluorescent assays
- Compatible with all common instruments
- Raised wells avoid cross-contamination
- Standard raised radius well shape

Cliniplates and Enhanced Binding Cliniplates offer excellent optical and binding precision. Uniform protein binding within and between plates.

6029A05	CLINIPLATE, Clear, Bx. 50	\$79.00
6029A10	CLINIPLATE Enhanced Binding, Clear, Bx. 50	105.00
6029A15	CLINIPLATE, Black, Bx. 50	93.00
6029A20	CLINIPLATE Enhanced Binding, Black, Bx. 50	145.00
6029A25	CLINIPLATE, White, Bx. 50	130.00
6029A30	CLINIPLATE Enhanced Binding, White, Bx. 50	145.00

Cliniplate 384

- Non-sterile plates without lids
- Faster reaction kinetics
- Compatible with automated and manual systems
- Rounded well improves mixing
- Less reagent use; less waste

The Cliniplate 384 offers higher sample density, faster kinetics, less waste and lower reagent costs. Suitable for a wide range of measurement techniques. Application areas include high throughput screening, PCR and mutagenicity and mutational spectra assays.

6029B01	CLINIPLATE 384, Clear, Bx. 50	\$109.00
6029B05	CLINIPLATE 384, White, Bx. 50	195.00
6029B10	CLINIPLATE 384, Black, Bx. 50	195.00

NUNC

IMMUNO MODULES

Developed for ELISA techniques



6935A13

- MaxiSorp™ or PolySorp™ surface treatment
- Shorter diffusion distance reduces incubation times
- Available in a variety of well shapes in 96-well frames or as individual strips and frames

- Standard 96-well format (86 x 128 mm) to fit standard equipment

Reusable, white polystyrene frame holds removable clear polystyrene 1x8 or 2x8 well strips. Frame designed so that MicroWell™ modules can only be inserted one way to ensure consistent orientation if they are removed and replaced during analysis. Frame skirt elevates bottoms of wells to prevent scratching. Wells have a round bottom, flat bottom or a flat bottom with a rounded edge to suit your assay requirements. Hydrophilic MaxiSorp surface is useful for immobilizing glycoproteins such as antibodies. Use PolySorp for adsorbing antigens. Both surface treatments are available with a Starwell™ geometry (6935AD1, AD4) that has a flat bottom with rounded edges and eight ribs. The ribs increase surface area for additional binding allowing for shorter incubation times and increased sensitivity and signal response. 6935AD1 comes with a certificate

NOTE: MaxiSorp surface is certified to assure binding uniformity

96 WELL IMMUNO ASSAY MODULES (FRAME AND WELL STRIPS)

THOMAS NO.	CAPACITY (mL)	SURFACE	WELL BOTTOM	NO. OF STRIPS: ROWS x WELLS	QTY	PRICE
6935AD1	0.380	MaxiSorp	Flat with curved edges and 8 ribs	Twelve: 1 x 8	Cs. 60	\$325.90
6935AD4	0.380	PolySorp	Flat with curved edges and 8 ribs	Twelve: 1 x 8	Cs. 60	310.94
6935AD7	0.4	MaxiSorp	Flat	Twelve: 1 x 8	Cs. 120	605.47
6935AD10	0.35	PolySorp	Flat with curved edges	Twelve: 1 x 8	Cs. 60	301.39
6935A13	0.4	MaxiSorp	Flat	Twelve: 1 x 8	Cs. 60	302.78
6935A16	0.4	PolySorp	Flat	Twelve: 1 x 8	Cs. 60	287.89
6935A19	0.3	MaxiSorp	Rounded	Twelve: 1 x 8	Cs. 60	254.09
6935A21	0.3	PolySorp	Rounded	Twelve: 1 x 8	Cs. 60	273.30
6935A24	0.4	MaxiSorp	Flat	Six: 2 x 8	Cs. 60	303.47
6935A27	0.4	PolySorp	Flat	Six: 2 x 8	Cs. 60	282.19

Replacement Well Strips

THOMAS NO.	CAPACITY (mL)	SURFACE TYPE	WELL BOTTOM	ROWS/WELLS	QTY	PRICE
6935A20	0.4	MaxiSorp	Flat	1 x 8	Cs. 640	\$202.45
6935A23	0.4	PolySorp	Flat	1 x 8	Cs. 640	183.50

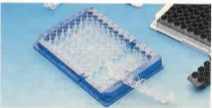
Immuno Module Frame

- Reusable frame (86 x 128 mm)
- 96 well format
- White polystyrene

Can be used with Nunc Immuno Well Strips interchangeably (Well Strips not included). Holds up to twelve 1 row/8 wells or six 2 row/16 wells style (see 6935A13 series).

6935A26 FRAME, Cs. 60 \$153.80

Immuno Modules with Colored Rims



6935A03

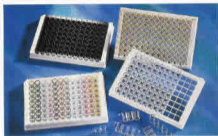
- Developed for ELISA techniques
- MaxiSorp™ surface treatment
- Free-standing, remain in frame when inverted
- Alphanumeric well identification
- Uniform reading and washing

Modules are assembled in frame and are standard 96 well format to fit standard equipment. Flat bottom wells with rounded edges facilitate rinsing. Units have a hydrophilic MaxiSorp™ surface recommended for use in assays where glycoproteins, such as antibodies, are adsorbed to the plastic surface. Frame dimensions: 86 x 128 mm.

6935B01	MODULE, 8-Well Strips, C-Bottom Immuno, Cs. 60	.....	\$318.50
6935B02	MODULE, 8-Well Strips, C-Bottom Immuno, Blue Rims, Cs. 60	.....	368.05
6935B05	MODULE, 8-Well Strips, C-Bottom Immuno, Black Rims, Cs. 60	.....	368.05
6935B07	MODULE, 8-Well Strips, C-Bottom Immuno, Green Rims, Cs. 60	.....	368.05
6935B09	MODULE, 8-Well Strips, C-Bottom Immuno, Orange Rims, Cs. 60	.....	359.08
6935B11	MODULE, 8-Well Strips, C-Bottom Immuno, Red Rims, Cs. 60	.....	369.84
6935B13	MODULE, 8-Well Strips, C-Bottom Immuno, White Rims, Cs. 60	.....	369.84
6935B15	MODULE, 8-Well Strips, C-Bottom Immuno, Yellow Rims, Cs. 60	.....	368.05

CORNING

STRIPWELL™ PLATE MODULES



6935E01

- High optical clarity
- Flat bottom design
- Certified Surface Chemistry certificate available

Designed for in-vitro diagnostic assays, Stripwell plates are manufactured from a special medical-grade polystyrene for uniform binding, high optical clarity and low background absorption. The 1 x 8 strips are designed to fit only one way into the strip holder, eliminating the chance for misorientation. The flat bottom strips are designed to easily break apart and are pre-assembled in an "egg-crate" style strip holder that allows each individual well to be positioned back into the plate once broken. Available in clear, black or white with either medium binding or high binding surface treatments.

The high binding Stripwell plate, with a binding capacity of ~500 ng of Mouse IgG/cm², offers a low CV ($\leq 3\%$). The medium binding plate has a binding capacity of ~250 ng of Mouse IgG/cm² and a CV of $\leq 5\%$. Background absorbance is nominal (≤ 0.005 units from the mean). Each is available with certification. Sold without lids. Carries 12 1x8 strips per plate. Well volume 360 μ L/well.

6935E01	ASSAY MODULE, Clear, High Binding, Co. 100	\$412.24
6935E04	ASSAY MODULE, Clear, Medium Binding, Co. 100	412.24
6935E07	ASSAY MODULE, White, High Binding, Co. 100	436.89
6935E10	ASSAY MODULE, White, Medium Binding, Co. 100	420.09
6935E13	ASSAY MODULE, Black, Medium Binding, Co. 100	504.09
6935E16	ASSAY MODULE, Black, High Binding, Co. 100	504.09

Individual 1 x 8 Strips Without Frame

The individual clear polystyrene strips are designed to fit into the "egg-crate" style holder, which can be purchased separately.

6935E19	STRIP WELLS, Clear, High Binding, Co. 600	\$240.24
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Accessories

6935E21	FRAME, for Strips, Co. 20	356.75
6935E24	STRIP EJECTOR, Co. 5	35.33
6935E27	STRIP TAPE, Co. 100	38.22

NUNC

IMMUNO ASSAY PLATES

Break-Apart Modules for Immuno Assay; "Certified"



6935H01

- Designed for increased assay flexibility based on the ability to separate individual wells
- Wells are easily detached for scintillation counting
- Assays can be performed on individual wells, so unused wells are not wasted
- 96-well format helps reduce costs by fitting existing automation
- Certificate included to guarantee coefficient of variation is below 5% and well absorption variation deviates less than 10% from mean
- Break-apart modules provide benefits for ELISA, RIA and DNA probes solid phase assays

Consists of two pieces, a strip of eight polystyrene wells is supported in a polypropylene carrier. Wells are 0.3 mL "C" bottom style (C-It™), which combines superior washing with a flattened bottom for optimum well reading. Frame that holds the Break-Apart Modules is made of rigid polystyrene. Holds 12 modules in the 96-well plate format. Frames are keyed for lid orientation and can be stacked with and without lids. Alpha-numeric coordinates are molded in the frame for identification of individual wells.

6935H01	MODULE, PolySorp, Co. 60 Plates	\$391.36
6935H05	MODULE, MaxiSorp, Co. 60 Plates	420.93
6935H10	PUSH-OUT TOOL	90.00
6935H15	FRAME, For 1 x 8 Strips, Co. 60	212.20



Thomas Tips

Sensitive Immunoassays

For sensitive immunoassays, it is advisable to use a blocking reagent after the first coating to minimize non-specific binding.

NUNC

COVALINK™ IMMUNO MODULES



6038A10

- Increases sensitivity in ELISA
- Allows for covalent binding of small molecules, haptens or oligonucleotides
- Thorough washing possible with very high ionic strength solutions
- Covalently attached secondary amine groups (NH-series)

High binding strength. No denaturation. Polystyrene 96 well flat bottom with 12 (1 x 8) well strips; Each well has activated surface for 100 μ L of coupling reagent.

6038A10	COVALINK™ IM MODULE, Clear, Flat Bottom, Co. 30	..... \$246.00
6038A15	COVALINK™ IM MODULE, White, C-Bottom, Co. 30	..... \$317.00

CORNING

COVALENT ASSAY PLATES

Well surfaces are modified to immobilize modules that do not ordinarily adsorb to polystyrene

DNA-BIND™



6038C01 series

- Solid and modular plates
- Flat bottom well geometry for increased surface area
- Black and white plates for fluorescence and luminescence applications

The DNA-BIND surface covalently binds to amine groups and provides a convenient method to

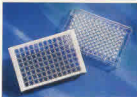
immobilize aminated ssDNA by either 5' or 3' end for hybridization and/or amplification and for other DNA-based assays. Surpasses conventional polystyrene binding surface to yield a high signal-to-noise ratio. Are also well suited for immobilizing single amino acids and oligonucleotides, but not antibodies. 6938C05 and C07 are stripwell plates while the other plates are solid. All plates come individually wrapped, without lids.

6038C01	DNA-BIND ASSAY PLATE, Clear, Flat Bottom 96, Co. 10	..... \$70.00
6038C03	DNA-BIND ASSAY PLATE, Clear, Flat Bottom 96, Co. 50	..... \$27.50
6038C05	DNA-BIND STRIPWELL ASSAY PLATE, Clear, FR 12 (1 x 8), Co. 50	..... \$36.00
6038C07	DNA-BIND STRIPWELL ASSAY PLATE, White, FR 12 (1 x 8), Co. 50	..... \$36.00
6038C09	DNA-BIND ASSAY PLATE, Black, Flat Bottom 96, Co. 50	..... \$27.00
6038C11	DNA-BIND ASSAY PLATE, White, Flat Bottom 96, Co. 50	..... \$27.00

CORNING

COVALENT ASSAY PLATES (continued)

Sulphydryl-BIND™ for Site-Directed Orientation of Specific Biomolecules



6038C13 series

Maleimide surface covalently binds with sulphydryl groups. They are especially well-suited for immobilizing antibodies. Select solid or stripwell plate. Both styles come individually wrapped, 50 to a case. Do not include lids.

6038C13	SULPHYDRYL-BIND ASSAY PLATE, Flat Bottom, 96 Well, Co. 50	..... \$327.00
6038C15	SULPHYDRYL-BIND STRIPWELL ASSAY PLATE, FR 12 (1 x 8), Co. 50	..... \$36.00

Carbo-BIND™

Carbo-BIND microplates have a hydrazide surface that covalently couples to carbohydrate groups. Ideal for assays requiring site-directed orientation of a particular biomolecule. Minimal surface preparation is required. Plates do not include lids.

6038C17	CARBO-BIND ASSAY PLATE, Flat Bottom, 96 Well, Co. 50	..... \$327.00
6038C19	CARBO-BIND STRIPWELL ASSAY PLATE, FR 12 (1 x 8), Co. 50	..... \$36.00

Amine 1 x 8 Stripwell Plate

- Excellent alternative to poly-L-Lysine coated plates

The amine surface is made up of positively charged amine groups (2×10^8 reactive sites/cm²) that can be used for covalent immobilization via bifunctional crosslinkers. To do so, the surface must first be activated by attaching a bifunctional crosslinker such as monomeric glutaraldehyde, bis-sulfosuccinimidyl subderate or carbodiimide. The plate can also be used on its own in the absence of crosslinkers as a positively charged ionic surface. Available in stripwell format only. 12 (1 x 8) strips/plate. Individually wrapped.

6038C21	AMINE STRIPWELL ASSAY PLATE, Flat Bottom 12 (1 x 8), Co. 50 \$390.00
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Universal-BIND™

Offers the ability to covalently immobilize almost any molecule provided at least one abstractable hydrogen is present. All that is required is a UV crosslinker; no surface preparation or pre-activation is necessary. The Universal Covalent Surface is ideal for the immobilization of dsDNA, antigens of unknown structure and samples containing a mixture of biomolecules. Plates are individually wrapped and do not include lids.

6038C23	UNIVERSAL-BIND ASSAY PLATE, Flat Bottom, 96 Well, Co. 50	..... \$327.00
6038C25	UNIVERSAL-BIND STRIPWELL ASSAY PLATE, FR 12 (1 x 8), Co. 50	..... \$36.00

NUNC

96 FLUORONUNC™ MODULES AND PLATES

For fluorescence-based immuno assays and ELISA technologies

- Minimum cross-talk
- Maxisorp™ and PolySorp® surfaces available
- Alphanumeric well identification
- Available in white, black or clear



Modules have 1 x 8, 1 x 12 or 2 x 8 strips in a 96 well configuration and have 96 MicroWell® format dimensions (86 x 128 mm) to fit standard equipment. Module strips remain in the frame during inversion. Modules are compatible with lids and sealing tape used for MicroWell plates. Plates are non-lidded and non-sterile.

6940A07 series

Available in C-bottom (CB) or flat bottom (FB) formats. Hydrophilic Maxisorp™ (MS) surface is recommended for glycoprotein adsorption. Maxisorp surface is certified for binding homogeneity. PolySorp® (PS) surface is hydrophobic for non-protein adsorption.

All units come packed 5 per sleeve, in a case of 60 except 6945A04, A07 and A10, which come 10 per sleeve, in a case of 60.

THOMAS NO.	SURFACE/WELL GEOMETRY	STRIP CONFIG.	TOTAL WELL VOL (µL)	TOTAL SURFACE AREA/WELL (cm ²)	COLOR	QTY.	PRICE
FluoroNunc Modules							
6940A01	MS/CB	1 x 8	350	2.5	White	Cs. 60	\$344.28
6940A03	PS/CB	1 x 8	350	2.5	White	Cs. 60	320.33
6940A05	MS/FB	2 x 8	400	2.7	Black	Cs. 60	329.73
6940A07	PS/FB	2 x 8	400	2.7	Black	Cs. 60	297.78
6940A09	MS/CB	1 x 12	350	2.5	Clear	Cs. 60	344.28
6940A11	PS/CB	1 x 12	350	2.5	Clear	Cs. 60	320.33

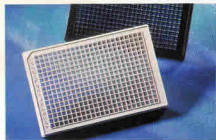
FluoroNunc Plates

6945A01	MS/CB	NA	350	2.5	Clear	Cs. 60	\$192.33
6945A04	MS/FB	NA	400	2.7	White	Cs. 60	247.94
6945A07	PS/FB	NA	400	2.7	White	Cs. 60	231.14
6945A10	MS/FB	NA	400	2.7	Black	Cs. 60	230.62

CORNING

384 WELL BLACK AND WHITE CLEAR-BOTTOM PLATES

Useful for through-plate readers and microscope viewing



6950A01 series

- Standard, automation-friendly 96-well footprint
- Reduces total working volume up to 90%
- Saves time and money
- 125 µL well volume

Black and White Clear Bottom Plates are available with either a tissue-culture-treated surface for cell-based assays or a non-treated surface for solution-based, homogenous assays. These plates are ideally suited for fluorescent and luminescent cell-based assays - perfect for direct microscopic viewing and CCD camera-based detectors. Readability from either top or bottom also affords some unique advantages, making these plates ideal for scintillation Proximity Assay (SPA). Standard footprint allows for easy integration into existing 96 well plate automation, enabling time and reagent savings. 6950A01 and A07 are non-treated plates without lids, and 6950A04 and A10 are tissue culture treated for enhanced cellular attachment. 6950A04 and A10 are sterile and include lids.

6950A01	384 FLUORESCENT ASSAY PLATE, White/Optical, NI, Cs. 100	3677.04
6950A04	384 FLUORESCENT ASSAY PLATE, White/Optical, TC, ST, Cs. 100	731.64
6950A07	384 FLUORESCENT ASSAY PLATE, Black/Optical, NI, Cs. 100	655.20
6950A10	384 FLUORESCENT ASSAY PLATE, Black/Optical, TC, ST, Cs. 100	709.80

Competitive Prices



You'll find our prices are competitive whether you're purchasing one item or thousands. Be sure to check with Thomas whenever you need pricing for a large multi-item order or an order for a single item.

We also invite you to let us quote on your annual purchasing requirements as your prime supplier of laboratory products.

CORNING

UV-PLATE FOR SPECTROPHOTOMETERS

Excellent for RNA/DNA and protein determinations without expensive quartz cuvettes

- Certified DNase and RNase free
- UV transparent bottom is molded, not adhered, to an acrylic top for maximum leak resistance
- Ideal for UV absorbance readings with low background, especially at 260 and 280 nm
- Flat bottom wells have volume of 370 μ L

UV-Plate has a special material molded onto the bottom that is transparent to UV light. This important feature enables researchers to determine nucleic acid and/or protein concentrations in a 96 well format. This eliminates the need for expensive quartz cuvettes and allows for higher throughput at a lower cost. The UV-Plate is compatible with the Bio-Tek PowerWave™ 200, the Bio-Tek μ Quant™, the Bio-Rad UltraMark™, the Molecular Devices SPECTRAmax™ 190 and 250 plate readers. It offers extremely low absorbance background, excellent well to well uniformity, and zero percent cross talk. Packed 25 plates per sleeve, 2 sleeves per case.

6950001 UV PLATE 96 Well, Flat Bottom, Co 50 \$49.50

NUNC

OPTICAL BOTTOM ASSAY PLATES

Accommodate top or bottom readers, imagers and CCD cameras



6952A01

- Rounded square well geometry
- Alphanumeric well identification
- MaxiSorp™ surface
- Standard 96-well footprint

Optical Bottom plates provide optimal clarity for viewing well contents. Rounded square well geometry reduces well-to-well contamination. Plates have a 96 well

footprint for compatibility with standard equipment and robotics, but offer 4 times the throughput of a 96-well plate (384 well). MaxiSorp™ surface allows homogenous adsorption of proteins with mixed hydrophilic/hydrophobic domains such as antibodies and other glyco-proteins.

6952A01 384 WELL OPTICAL BOTTOM PLATE, Black, Co. 30 \$199.95

6952A05 384 WELL OPTICAL BOTTOM PLATE, White, Co. 30 211.86

NUNC

96 MICROWELL® PLATES

Raised rims and lids have condensation rings to help prevent cross-contamination



6960A01

- Standard 96 MicroWell Plate format with choice of well shapes
- Lid designed for easy orientation and stacking
- Pinch bar design for easy manual handling

The non-treated polystyrene plates are for antibiotic screens, serological tests, compound storage and DNA libraries. Conical or round wells each hold 0.3 mL total volume; flat wells 0.4 mL.

6960A05 and 6960A11 come with lids. 6960A03, A05 and A09 are sterile.

6960A01, A07 and A13 come 5 to a Sleeve. 6960A03 and A09 are individually wrapped. 6960A05 and A11 come 10 to a sleeve.

6960A01 96 WELL PLATE, Clear Polystyrene, Conical Bottom NS, Co. 140 \$187.05

6960A03 96 WELL PLATE, Clear Polystyrene, Conical Bottom, S, Co. 50 110.30

6960A05 96 WELL PLATE, Clear Polystyrene, Conical Bottom, S, Co. 190 369.06

6960A07 96 WELL PLATE, Clear Polystyrene, Flat Bottom, NS, Co. 60 77.56

6960A09 96 WELL PLATE, Clear Polystyrene, Flat Bottom, S, Co. 50 116.33

6960A11 96 WELL PLATE, Clear Polystyrene, Round Bottom NS, Co. 160 315.31

6960A13 96 WELL PLATE, Clear Polystyrene, Round Bottom, NS, Co. 140 179.92



24-hour order turnaround!

Thomas ships over 98% of domestic orders for in-stock items the same day we receive them. We are extremely proud of this record! On

request, we can even assure overnight delivery of a customer's order via national and international carriers.

CORNING

96 AND 384 WELL STREPTAVIDIN-COATED MICROPLATES

Microplates are pre-blocked to eliminate non-specific binding and are ready for immediate use

- Stable homogenous coating
- Detergent resistant
- Higher sensitivity
- For solid-phase assays
- High Biotin affinity (10^{11} KD)

Homogenous streptavidin coating on microplates ensures high binding capacity of biotin.

Therefore, reproducible results are ensured whether using biotinylated single or double molecules in your assays. Covalently bound streptavidin minimizes leaching (<5 ng per well) even in high salt concentrations of 500 mM NaCl and detergent concentrations of 1% SDS. The stable uniform surface provides reproducible results. The high specificity improves signal-to-noise ratios for higher sensitivity. All are packed 25/sleeve, case 100 without lids.



6962D01 series

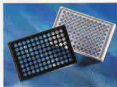
6962D01	96 WELL CLEAR STREPTAVIDIN MICROPLATE, FB, Co. 100	\$2,034.00
6962D03	96 WELL BLACK STREPTAVIDIN MICROPLATE, FB, Co. 100	2,131.00
6962D05	96 WELL WHITE STREPTAVIDIN MICROPLATE, FB, Co. 100	2,131.00
6962D07	384 WELL CLEAR STREPTAVIDIN MICROPLATE, Co. 100	2,664.00
6962D09	384 WELL WHITE STREPTAVIDIN MICROPLATE, Co. 100	2,239.00
6962D11	384 WELL BLACK STREPTAVIDIN MICROPLATE, Co. 100	2,239.00

CORNING

96 AND 384 WELL LYSINE MICROPLATES

Poly-D-Lysine Plates, with Lid

- Clear bottom plates
- Built to proposed industry standard footprint
- Available in clear, black and white with flat bottom



6962D13 series

Poly-D-Lysine is a synthetic molecule used to enhance cell attachment to plastic surfaces. The nature of the culture substrate has a major effect on cell growth and the requirements for serum proteins. Packed 25/sleeve and 100/case.

6962D13	96 WELL CLEAR LYSINE MICROPLATE, FB, Co. 100	\$675.00
6962D15	96 WELL WHITE LYSINE MICROPLATE, FB, Co. 100	1,513.00
6962D17	96 WELL BLACK LYSINE MICROPLATE, FB, Co. 100	1,513.00
6962D19	384 WELL CLEAR LYSINE MICROPLATE, FB, Co. 100	1,945.00
6962D21	384 WELL WHITE LYSINE MICROPLATE, FB, Co. 100	2,256.00
6962D23	384 WELL BLACK LYSINE MICROPLATE, FB, Co. 100	2,256.00

NUNC

96 FLUORONUNC™ PLATES

Non-treated 96 MicroWell® Plates for fluorescence-based assays



6965A01 series

- Raised well rims of flat-bottom wells reduce risk of cross-contamination
- Minimum cross-talk
- Sterile with clear lids
- 0.4 mL total volume per well
- Standard 96 well format to fit standard equipment

96 FluoroNunc™ Plates can be used for antibiotic screening, serological tests, screening of compound and DNA libraries. Plates are compatible with lids and sealing tape used for MicroWell plates.

6965A01	WHITE FLUORESCENCE PLATE 96, Flat Bottom, Sterile, Co. 160	\$437.74
6965A03	BLACK FLUORESCENCE PLATE 96, Flat Bottom, Sterile, Co. 160	407.00



Thomas Tips

Microtiter Comb for 96-Well Plates

96 well multiwell plates have a standardized 0.9 mm center-to-center distance to be used in conjunction with multichannel pipettors (8 or 12 channel) and electrophoresis equipment. The microtiter comb that would give this exact distance when loading gel samples would be a 1X microtiter comb.

NUNC

POLYPROPYLENE MICROWELL® PLATES



6970A01 series

combinatorial chemistry. White polypropylene plates are perfect for luminescent applications, as they maximize the reflection of the signal and minimize the autoluminescent and autofluorescent signals. Black polypropylene plates are useful for fluorescent applications, reducing background fluorescence and minimizing backlight scatter.

Round Bottom Well Plates (0.5 mL/well)

6970A01	96 WELL PLATE, Polypropylene, Natural, Non-Sterile, Cs. 120	\$227.66
6970A03	96 WELL PLATE, Polypropylene, Natural, Sterile, Cs. 120	259.17
6970A05	96 WELL PLATE, Polypropylene, Blue, Non-Sterile, Cs. 120	227.66
6970A07	96 WELL PLATE, Polypropylene, Red, Non-Sterile, Cs. 120	227.66
6970A09	96 WELL PLATE, Polypropylene, Yellow, Non-Sterile, Cs. 120	227.66
6970A11	96 WELL PLATE, Polypropylene, White, Non-Sterile, Cs. 120	262.92
6970A13	96 WELL PLATE, Polypropylene, Black, Non-Sterile, Cs. 120	262.92

Conical Bottom Well Plates (0.45 mL/well except 6970A19 - 0.3 mL/well)

6970A19	96 WELL PLATE, Polypropylene, Natural, Non-Sterile, 0.3 mL, Cs. 60	\$150.30
6970A21	96 WELL PLATE, Polypropylene, Natural, Non-Sterile, Cs. 120	222.11
6970A23	96 WELL PLATE, Polypropylene, Natural, Sterile, Cs. 120	252.94
6970A25	96 WELL PLATE, Polypropylene, Blue, Non-Sterile, Cs. 120	222.11
6970A27	96 WELL PLATE, Polypropylene, Red, Non-Sterile, Cs. 120	222.11
6970A29	96 WELL PLATE, Polypropylene, Yellow, Non-Sterile, Cs. 120	222.11
6970A31	96 WELL PLATE, Polypropylene, White, Non-Sterile, Cs. 120	276.02
6970A33	96 WELL PLATE, Polypropylene, Black, Non-Sterile, Cs. 120	276.02

Caps for 96 Polypropylene MicroWell® Plates

- Easy removal without aerosols
- Minimal protrusion into wells
- Available in an assortment of colors

Caps are molded of plastic elastomer, which is resistant to many chemicals and can withstand a wide variety of temperatures. Material is pierceable with hypodermic needles, yet is self-closing and does not crack or break.

6970A51	96 WELL CAP, Polypropylene, Natural, Non-Sterile, Cs. 50	\$107.02
6970A53	96 WELL CAP, Polypropylene, Natural, Sterile, Cs. 50	145.89
6970A55	96 WELL CAP, Polypropylene, Blue, Non-Sterile, Cs. 50	139.26
6970A57	96 WELL CAP, Polypropylene, Red, Non-Sterile, Cs. 50	139.26
6970A59	96 WELL CAP, Polypropylene, Yellow, Non-Sterile, Cs. 50	139.26

NUNC

POLYPROPYLENE
384 WELL PLATES

4 times more wells than a 96 well plate for assay miniaturization and cost savings



6970B01 series

- Same footprint as 96 well plate, compatible with robotics and automated equipment
- Rounded square design and round bottom minimizes wicking
- Efficient washing and maximum recovery of contents

Exhibiting minimal binding properties, these plates are ideal for liquid phase assays, sample preparation, storage and chemical synthesis. Versatile plates are non-toxic, resistant to most chemicals, solvents and alcohols and resistant to temperatures from -80 to +80°C. Well volume is just 120 µL. Available in natural (sterile or non-sterile), red, blue, yellow, black and white. All come without lid.

6970B01	384 WELL PLATE, Natural, Non-Sterile, Cs. 120	\$445.98
6970B03	384 WELL PLATE, Natural, Sterile, Cs. 120	467.94
6970B05	384 WELL PLATE, White, Non-Sterile, Cs. 120	491.66
6970B07	384 WELL PLATE, Black, Non-Sterile, Cs. 120	491.66
6970B09	384 WELL PLATE, Red, Non-Sterile, Cs. 120	454.13
6970B11	384 WELL PLATE, Yellow, Non-Sterile, Cs. 120	454.13
6970B13	384 WELL PLATE, Blue, Non-Sterile, Cs. 120	454.13

384 WELL PLATE

Designed for high-volume laboratory work



6970820

- Conical flat bottoms ensure even aspiration
- Skirted side walls for bar coding and labeling
- Large, legible alphanumeric for easy identification
- RNase, DNase and pyrogen free
- Compatible with all PCR thermal cyclers

384 well plates are manufactured from virgin polypropylene. Well plates feature thin walls for efficient and rapid heat transfer. Holes in the sides of the plates allow for accurate and precise positioning. The plates' uniform and precise well-to-well measurements enable easy removal from thermal blocks. Well capacity is 40 μ L each. Available in ultra clear, white and black for standard, chemiluminescent and fluorescent procedures.

6970820 WELL PLATE, 384, Natural, Bx 50 \$275.00

6970823 WELL PLATE, 384, White, Bx 50 \$275.00

6970826 WELL PLATE, 384, Black, Bx 50 \$275.00



Thomas Tips

Non-Binding Surface Treatments

For instances where non-specific binding of protein is a problem for your assay, polystyrene plates with Non-binding Surface Treatment (NBS) may offer a solution.

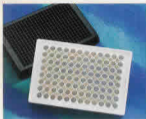
CORNING

BLACK AND WHITE POLYPROPYLENE ASSAY PLATES

Reduces non-specific-binding of compounds to micro wells

- Polypropylene construction
- Round bottom design
- Non-sterile

The black and white polypropylene assay plates are an ideal platform for fluorescence and luminescent assays that have a compound non-specific-binding problem while using polystyrene plates. These plates offer low compound sticking as well as higher solvent resistance compared to polystyrene plates. Non-treated. Lid not included. 6972A07 designed for through-bottom plate readers.



6972A07 series

6972A01 96 WELL PLATE, Black, Pk. 25/Cs. 100 \$273.00

6972A03 96 WELL PLATE, White, Pk. 25/Cs. 100 \$273.00

6972A05 384 WELL PLATE, Black, Pk. 25/Cs. 100 \$49.44

6972A07 96 WELL PLATE, Black, Optical Bottom, Pk. 25/Cs. 100 \$36.80

NUNC

POLYSTYRENE 384 WELL PLATES

Designed for high throughput screening and DNA library manipulations

- Working well volume of 10 to 100 μ L
- Space saving for freezer or bench top
- Automation compatible

Features a rounded square well with flat bottom, which reduces the risk of well-to-well contamination. Available in clear for colorimetric assays and storage; black for fluorescent assays; and white for luminescent and fluorescent assays. Select sterile with lid or non-sterile without lid. 6972C13 comes with low-profile lid. Can also be used for storage, cloning and replication.



6972C05 series

6972C05 384 WELL PLATE, Clear Non-Sterile, w/o Lid, 10/Sleeve, Cs. 30 \$29.54

6972C07 384 WELL PLATE, White, Non-Sterile, w/o Lid, 10/Sleeve, Cs. 30 \$16.72

6972C09 384 WELL PLATE, Black, Non-Sterile, w/o Lid, 10/Sleeve, Cs. 30 \$19.36

6972C11 384 WELL PLATE, Clear Sterile, w/Lid, 10/Sleeve, Cs. 30 \$55.40

6972C13 384 WELL PLATE, Clear Sterile, w/Low Profile Lid, 10/Sleeve, Cs. 30 \$30.45

NUNC

SILENT SCREEN™ MEMBRANE
FILTER PLATES

Come in a variety of membranes, pore sizes and colors to increase application flexibility



6975A01 series

- Tri-layer membrane design
- Detection system flexibility
- Unique individual membrane-to-well seal
- Instrument-compatible

Silent Screen plates allow for specific molecules to be bound to a membrane on the bottom of the MicroWell plate or selective filtration. Unique triple layer membrane sealing prevents crosstalk between wells.

Fluid from the plate bottom can be evacuated via centrifuging or vacuum following incubation, immobilization or precipitation.

The membrane (except HPVM) may be peeled from the plate after filtration to allow further analysis. Plates can be used in receptor binding assays, drug screening, solid phase immunoassays, bead or particle assays, nucleic acid binding, cell separation assays, multiple sample preparation, gene probe assays and filtration assays. White Silent Screen Plates exhibit enhanced reflective properties for luminescent detection, as well as enhanced chemical compatibility for scintillation detection. Black plates are recommended for fluorescent detection. General usage guidelines suggest Loprodyn® or HPVM Membranes for filtration and Biodyne® A or B for binding.

Standard plate size of 86 x 128 mm in 96 MicroWell® format. Each well is 6 mm diameter x 10 mm deep, with effective filtration area of 0.2 cm² per well. Sterile plates come with lid, non-sterile without lid. Other pore sizes and plate colors are available, but not shapes.

SPECIFICATIONS

APPLICATION	SUGGESTED PLATE TYPE	MEMBRANE SPECIFICS
Solid Phase Immunoassays	Biodyne® A or B	BA for medium protein and nucleic acid binding; B for high protein nucleic acid binding
Enzyme Assays	HPVM	HPVM with no reactive surface chemistry for binding molecules
Receptor Binding Assays	HPM or Loprodyn®	Loprodyn for low protein and nucleic acid binding
Bead/Resin Assays		

6975A01	MEMBRANE PLATE, 96 Well, Clear, LoPro, NS, NL, 0.45 µm, Co 50	6071.38
6975A03	MEMBRANE PLATE, 96 Well, Clear, LoPro, NS, NL, 1.2 µm, Co 50	671.38
6975A05	MEMBRANE PLATE, 96 Well, Clear, LoPro, NS, NL, 3.0 µm, Co 50	671.38
6975A07	MEMBRANE PLATE, 96 Well, Clear, BA, NS, NL, 0.45 µm, Co 50	671.38
6975A09	MEMBRANE PLATE, 96 Well, Clear, BA, NS, NL, 0.45 µm, Co 50	671.38
6975A11	MEMBRANE PLATE, 96 Well, Clear, HPVM, NS, NL, 0.2 µm, Co 50	671.38
6975A80	VACUUM MANIFOLD, Each	1316.03
6975A85	TRAY MANIFOLD, Each	131.64
6975A87	MEMBRANE PLATE/LID, Clear, NS, Co 60	60.75

CORNING

96 WELL FILTER PLATES

For use with centrifuge or vacuum manifold



6975C01 Series Plates with 6975C30 Volume Adapter

- Meet proposed SBS standard footprint
- Design of nozzle prevents cross-contamination
- Wide skirt accepts bar codes

96 well filter plates feature rigid side walls of white polystyrene, making the plate ideal for automation. The individual filter disks are encapsulated in the plate by a special over-molding process to ensure the integrity of each well. Glass fiber filter plates can be used for a variety of applications including plasmid isolation, DNA purification or receptor/ligand binding assays. The low protein binding hydrophilic PVDF membrane can be used for protein kinase assays or for bead or resin-based separation assays, as well as PCR clean-up, dye terminator cleanup and separation/filtration assays. Well volume 360 µL.

6975C01	FILTER PLATE, 0.2 µm, PVDF, Non-Sterile, Pk 10/Cs 50	600.00
6975C03	FILTER PLATE, 0.2 µm, PVDF, Sterile, Pk 10/Cs 50	620.00
6975C05	FILTER PLATE, 0.25 µm, Glass Fiber, Non-Sterile, Pk 10/Cs 50	600.00
6975C07	FILTER PLATE, 0.66 µm, Glass Fiber, Non-Sterile, Pk 10/Cs 50	600.00

Volume Adapter and Applicator

A volume adapter allows larger volumes (1 mL) to be applied to the filter plate. The applicator easily assembles and disassembles the filter plate and adapter to ensure a perfect, leak-free fit.

6975C30	VOLUME ADAPTER, Pk 10, Co 50	\$108.00
6975C35	SAMPLE APPLICATOR, Ea	968.00

WHATMAN

UNIFILTER® FILTER BOTTOM MICROPLATE

Ready-to-use, disposable filter bottom microplates for screening cell cultures, hybridomas on antibodies and much more

- Multi-functional
- 96-well plate format
- 350 or 800 µL wells

Each well is individually sealed to eliminate cross talk between wells. Drip directors ensure filtrate is captured in proper well with no splash or cross-contamination.

Microplates are available in several grades of glass fiber with filters for fast evacuation and assay development. There is also a wide selection of membranes for microfiltration of a full range of diverse solutions including organic and low protein binding.

Other applications include immuno assays, cell harvesting, hybridizations, DNA elution of agarose gels, immuno dot blots, gene probe testing, isotopic assays, ligand binding assays, macro-molecule separation, scintillation counting and solvent filtration.



6975F01

350 µL Microplates, White Polystyrene

6975F01	UN-FILTER, GF/C Glass Fiber, Pk. 50	\$510.00
6975F04	UN-FILTER, Hydrophobic GF/C Glass Fiber, Pk. 50	\$10.00
6975F07	UN-FILTER, GF/B Glass Fiber, Pk. 50	\$10.00
6975F10	UN-FILTER, Polystyrene, 25-30 µm Coarse Filter, Pk. 50	\$10.00
6975F13	UN-FILTER, 0.45 µm Polypropylene Membrane, Pk. 50	\$10.00
6975F16	UN-FILTER, 0.45 µm PVDF Membrane, Pk. 50	\$10.00
6975F19	UN-FILTER, 0.45 µm Nitrocellulose Membrane, Pk. 50	\$10.00
6975F22	UN-FILTER, 0.45 µm Cellulose Acetate Membrane, Pk. 50	\$10.00
6975F25	UN-FILTER, 0.45 µm Nylon Membrane, Pk. 50	\$10.00
6975F28	UN-FILTER, GF/F Glass Fiber, Pk. 50	\$10.00
6975F31	UN-FILTER, GF/D Glass Fiber, Pk. 50	\$10.00
6975F34	UN-FILTER, P-81 Strong Cation Exchange Paper, Pk. 50	\$10.00
6975F37	UN-FILTER, DE-81 Weak Anion Exchange Paper, Pk. 50	\$10.00

800 µL Microplates, Clear Polystyrene

6975F40	UN-FILTER, GF/C Glass Fiber, Pk. 25	\$419.00
6975F43	UN-FILTER, Hydrophobic GF/C Glass Fiber, Pk. 25	419.00
6975F47	UN-FILTER, GF/B Glass Fiber, Pk. 25	419.00
6975F50	UN-FILTER, Polystyrene, 25-30 µm Coarse Filter, Pk. 25	419.00
6975F53	UN-FILTER, 0.45 µm Polypropylene Membrane, Pk. 25	419.00
6975F56	UN-FILTER, 0.45 µm PVDF Membrane, Pk. 25	419.00
6975F62	UN-FILTER, 0.45 µm Cellulose Acetate Membrane, Pk. 25	419.00
6975F65	UN-FILTER, 0.45 µm Nylon Membrane, Pk. 25	419.00
6975F68	UN-FILTER, GF/F Glass Fiber, Pk. 25	419.00
6975F71	UN-FILTER, GF/D Glass Fiber, Pk. 25	419.00
6975F74	UN-FILTER, P-81 Strong Cation Exchange Paper, Pk. 25	419.00

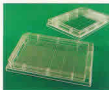
WHATMAN

UNIPLATE®

Collection microplates for membrane filter plates

- Fit most readers and robotic equipment
- Various well volumes
- Clear, white, natural or black plastic available
- Available in 48 and 96 well styles

One piece molded microplates designed for specific laboratory applications. Black plates are available for fluorescence applications with no well-to-well interferences. White plates are available for UV detection without cross talk from well-to-well. Clear polystyrene plates are for accurate colorimetric determination. A single well plate with 75 mL capture reservoir for pooling of filtrate or nonspecific filter plate applications. All plate material is polystyrene, with the exception of 6975G13, which is polypropylene.

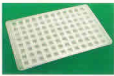


6975G03

6975G03	MICROPLATE, 48 Well, 1.5 mL, Clear, Pk. 50	\$119.00
6975G05	MICROPLATE, 96 Well, 300 µL, Clear, Pk. 50	\$1.90
6975G07	MICROPLATE, 96 Well, 300 µL, White, Pk. 50	\$1.90
6975G09	MICROPLATE, 96 Well, 300 µL, Black, Pk. 50	\$1.90
6975G11	MICROPLATE, 96 Well, 600 µL, Clear, Pk. 25	187.10
6975G13	MICROPLATE, 96 Well, 2.0 mL, Natural, Pk. 25	128.80

UNISEAL™ Microplate Sealers

- Controls humidity
- Eliminates evaporation of a sample
- Prevents spills and contamination
- Heat sealable inert film lids for sensitive samples



6975G27

An improved alternative to sealing microplates with 3-inch tape. This custom design of plate seals and lids will meet the demands of varying conditions. Self-sticking seals ensure fast and effective closure. Sealers have reusable cap mat and snug fitting lids for standard or square well 96 well microplates. Loose fitting clear polystyrene lid is ideal for robotic applications.

6975G15	UNISEAL, Clear Polyester Adhesive Film, Bx. 100	\$44.30
6975G17	UNISEAL, Aluminum Heat-Sealable Film for PCR, Bx. 100	44.30
6975G19	UNISEAL, Heat Sealable, Clear Polypropylene Film, Bx. 100	44.30
6975G21	UNISEAL, Square Cap Mat, 96 Well, Bx. 100	196.30
6975G23	UNISEAL, Round Cap Mat, 96 Well, Bx. 100	196.30
6975G25	UNISEAL, Clear Polystyrene Lids for Microplates, Bx. 100	69.50

WHATMAN

UNIVAC™ VACUUM MANIFOLD

For 96 and 384 well filter plates



6975050

- Alternative to centrifugation
- Two models for either common or discrete filtrate collection
- Built-in stopcock
- Uniform pressure drop in wells

For convenient use with disposable filter bottom microplates and a vacuum source, not supplied. The built-in hose barb and stopcock easily attach to standard vacuum tubing (see 9560B30). Stopcock and bleed valve allows positive control over the system, which provides uniform pressure for complete evacuation of the plate wells into a common collection well. Univac 1 is a single station unit which completely evacuates all liquid and is constructed of dimensionally stable polyurethane. Univac 3 is a two-stage unit constructed of anodized aluminum and will process the most aggressive solutions and can be cleaned and sterilized by most common laboratory methods. The two-stage device is for the transfer of liquid from each well of the filter plate to the corresponding wells of a collection plate.

6975050	UNIVAC 1, Single Station	\$391.00
6975055	UNIVAC 3, Two Station	1,550.00

CORNING

96 WELL STORAGE PLATES



6977403

- Automation friendly
- Solvent resistant
- Certified RNase/DNase-free

These 96 well polypropylene plates are built to the industry standard footprint. They are available in flat, round and V-bottom formats to meet a wide variety of assay and storage needs. V-bottom holds 320 μ L. Flat and round bottom hold 360 μ L. All are white and non-sterile.

6977401	STORAGE PLATE, 96 Well, Polypropylene, V-Bottom, Co 100	\$180.59
6977402	STORAGE PLATE, 96 Well, Polypropylene, Flat Bottom, Co 100	180.59
6977403	STORAGE PLATE, 96 Well, Polypropylene, Round Bottom, Co 100	180.59

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The Thomas Scientific One-Year Warranty!

Provides that all instruments sold by us will be free from defects in materials and workmanship for one year.

We guarantee total satisfaction for all products purchased from Thomas Scientific

Thomas Scientific

HIRSCHMANN LABORGERÄTE

GLASS DEEP WELL PLATES

For high throughput screening applications

- Chemically inert
- Solvent resistant
- Highly pure
- Individual and fixed cavities
- Lightweight

Glass plates meet requirements for use in combinatorial chemistry and high speed chromatography without the problems that sometimes arise from the use of polystyrene or polypropylene plates. Model 6977B20 and 625 have detachable wells.

96 well plates have a volume of 1,200 μL per well; 384 well plates have a volume of 250 μL per well; and 1536 well plates have a volume of 50 μL per well. Total weight including inserts is 289 g, 23.5 g and 768 g respectively for 96, 384 and 1536-well plates.



#977605

6977800	GLASS DEEP WELL PLATE, 96 Well	\$71.29
6977816	GLASS DEEP WELL PLATE, 384 Well	123.00
6977815	GLASS DEEP WELL PLATE, 1536 Well	251.00
6977820	GLASS DEEP WELL PLATE, 96 Well, w/Detachable Wells	57.50
6977825	GLASS DEEP WELL PLATE, 384 Well, w/Detachable Wells	127.15

CORNING

96 WELL ASSAY BLOCKS

- Certified DNase/RNase-free
- Sterile and non-sterile configurations
- Available in V-bottom or Round-bottom



6977C07 series

These deep-well plates are made of polypropylene. Available in 1 or 2 mL volume formats.

6977C01	ASSAY BLOCK, 96 Well, 2 mL, Polypropylene, V-Bottom, Sterile, Co. 25	\$106.00
6977C03	ASSAY BLOCK, 96 Well, 2 mL, Polypropylene, V-Bottom, Co. 100	572.00
6977C05	ASSAY BLOCK, 96 Well, 1 mL, Polypropylene, Round Bottom, Sterile, Co. 25	104.00

NUNC

GeNUNC[®] MODULAR IMMUNO ASSAY PLATE

96-Well format for DNA sequencing, restriction analysis, transformations, ligations and storage



6979A01 series

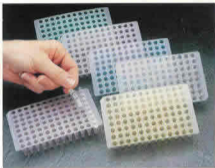
- Minimal adsorption of nucleic acids on surface
- Small liquid surface area reduces evaporation
- Thermo stable from -70°C to 121°C
- Certified DNase and RNase free
- Replaces microcentrifuge tubes and racks
- Two well volumes: 250 and 20 μL

GeNunc[®] modules are strips of wells that can be combined into an automation-friendly 96-well plate size and format. The GeNunc system is designed for mini-preps, sequencing, restriction enzyme analysis, priming and more. All strips use the same convenient frame. Each well is individually numbered and convenient writing areas on the strip allow additional labeling. A unique pressure resistant tape ensures minimum evaporation and withstands temperatures from -20°C to 100°C .

The 250 μL modules have a "shell" on the inside wall of the well. Microliter volumes of reagents can be placed on the shell. Simply taping the well mixes the reagents, eliminating centrifugation. Frames and modules are packaged separately.

6979A01	MODULES, 250 μL , 1 x 12 Strip, Bx. 70	\$44.95
6979A03	MODULES, 250 μL , 1 x 12 Strip, Co. 420	242.21
6979A05	MODULES, 20 μL , 4 x 12 Strip, Bx. 26	57.82
6979A07	MODULES, 20 μL , 4 x 12 Strip, Co. 158	312.21
6979A09	FRAME, for Modules, Co. 16	23.84
6979A11	FRAME, for Modules, Co. 96	123.73
6979A13	TAPE FOR 12 WELL STRIP, 9 x 120 mm, Bx. 100	30.16
6979A15	TAPE FOR 12 WELL STRIP, 9 x 120 mm, Co. 400	72.63
6979A17	TAPE FOR 48 WELL STRIP, 35 x 120 mm, Bx. 100	30.53
6979A19	TAPE FOR 48 WELL STRIP, 35 x 120 mm, Co. 400	181.91

SORENSEN

µPLTI 96-WELL ULTRA PLATE*Certified RNase/DNase-free*

6979801 series

- Fits PE 9700 and all popular thermal cyclers
- Thin wall design reduces cycle time
- Compatible with most robotics and liquid handling systems
- Alphanumeric labeled for quick identification

Rigid one-piece design eliminates plate distortions and provides a dependable fit between thermal cycler and the PCR plate to provide optimal convenience and handling. They are well suited for silicone/rubber sealing mats, adhesive sealing sheets or standard cap strips. Complete sealing facilitates oil-free PCR and allows reaction volumes of as little as 10 µL.

6979801	ULTRA PLATE 96 WELL, PCR Rigid Natural, Pk. 25	519.00
6979803	ULTRA PLATE 96 WELL, PCR Rigid Red, Pk. 25	719.00
6979805	ULTRA PLATE 96 WELL, PCR Rigid Blue, Pk. 25	719.00
6979807	ULTRA PLATE 96 WELL, PCR Rigid Green, Pk. 25	719.00
6979809	ULTRA PLATE 96 WELL, PCR Rigid Yellow, Pk. 25	719.00

ADHESIVE FILMS FOR MULTIWELL ASSAY PLATES

SealPlate™, ThinSeal™ and ThermoSeal™—an economical alternative to plate covers



6980401

- Prevent spillage
- Option of non-sterile or sterile
- Eliminates the edge effect in sensitive ELISA assays
- Two end-tabs allow for easier and more accurate positioning of the film to the plate
- Convenient EZ-Open Ziplock packaging

Designed for the sealing of microplates, these adhesive sealing films eliminate well-to-well contamination and crossover. Ideal for sensitive ELISA/EIA assays and PCR applications, where the minimization of evaporation and vapor loss is critical. Film can also be used to seal tissue culture plates for short term storage/incubation and for the containment of biohazardous solutions. The end-tab backing can be removed and the film applied around and over edges of the plate for a more secure seal. These tabs are perforated to allow for easy removal in the advent of interference with automated equipment. SealPlate™ is a 2 mm polyester film with acrylic adhesive and a functional temperature range of -40 to +120°C, ideal for ELISA/EIA. ThinSeal™ has the same performance characteristics with a liner thickness to allow for piercing with a pipettor. Choose pressure-resistant ThermoSeal™ for PCR applications. It is RNase/DNase-free and has a usable temperature range of -40 to +125°C.

6980401	SEALPLATE, Non-sterile, Pk. 100	537.50
6980403	SEALPLATE, Sterile, Pk. 100	51.65
6980405	THINSEAL, Non-sterile, Pk. 100	42.00
6980407	THINSEAL, Sterile, Pk. 100	56.25
6980410	THERMOSEAL, Non-Sterile, Pk. 100	47.90
6980413	THERMOSEAL, Sterile, Pk. 100	63.10

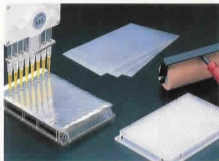
*(continued on next page)***PCR Products**

Thomas has a variety of PCR products, such as strip tubes, individual PCR tubes and caps, PCR work-up racks and storage boxes, which are found in the molecular biology section that begins at 6826A01.



ADHESIVE FILMS FOR MULTIWELL ASSAY PLATES

AlumaSeal™



6980A15

- Protects light-sensitive compounds
- Chemically resistant
- Inert and leach-free
- Eliminates well-to-well contamination and crossover while minimizing evaporation
- Ideal for robotics

AlumaSeal™ film is designed for high throughput screening applications and long term storage and transport of Microwell plates. AlumaSeal can be used for the harshest environments and conditions, such as cold storage and incubation. This aluminum-based foil film is excellent for sealing plates which contain compounds or reagents that are light sensitive and is pierceable to allow for direct sample recovery without peeling. The proprietary adhesive provides an excellent seal when used with both polystyrene and polypropylene microplates, as well as deep well plates. AlumaSeal has a functional temperature range of -80°C to +130°C.

6980A15	ALUMASEAL, 96, 25	.....	\$18.00
6980A17	ALUMASEAL, 96, 100	.....	72.00

UVSeal™

- Yellow, UV blocking, inert top coat

UV blocking layer reduces light emissions. It is designed for use with high sensitivity instrumentation where too much light causes an inaccurate reading. UVSeal eliminates the need to change protocols in order to minimize excess UV light. Other features similar to SealPlate™ film (6980A01).

6980A19	UVSEAL, 96, 100	\$48.25
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ADHESIVE FILMS FOR MULTIWELL ASSAY PLATES

SureSeal™

- Chemically resistant
- Double end tabs
- Perforated

Designed for use with harsh chemicals, solvents and reagents. SureSeal is ideal for several applications: cold storage, incubation, transport and high throughput screening.

6980A21	SURESEAL, 96, 100	\$41.00
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AeraSeal™

- Non-cytotoxic
- Available in sterile or non-sterile packages

Microporous film is designed for the sealing of tissue culture plates, bio blocks and 96 well plates where air and gas exchange are necessary for cell growth or bacterial cultivation. AeraSeal minimizes well-to-well cross-contamination, sample spillage and evaporation.

6980A23	AERASEAL, Non-Sterile, Pk. 100	.....	\$69.25
6980A25	AERASEAL, Sterile, Pk. 100	.....	41.25

NUNC

SEALING TAPE



6980A30

- Minimizes evaporation
- Individual sheets with easy-to-peel backing

Covers entire surface of plate with non-toxic, self-adhesive film. It provides an effective seal on polypropylene and polystyrene plates to prevent evaporation and minimize contamination. Acrylate adhesive is compatible with aqueous solutions and can be used from -70° to 110°C. The individual sheets are easily handled with tabs and easy-to-peel backing.

6980A30	TAPE, Non-Sterile, Polyolefin, Ca. 100	.....	\$55.25
6980A35	TAPE, Sterile, Polyester, Ca. 200	.....	118.40

NUNC

SEALING TAPE

Breathable Sealing Membrane



6980A40

- Provides seal for each individual well
 - Reduces well evaporation
 - Sterile, clear polyurethane
- 3M™ adhesive technology effectively seals any MicroWell™ plate while allowing gas equilibration. Gas permeable membrane reduces loss of H₂O due to evaporation while allowing efficient gas equilibration. Membrane prevents well-to-well cross-contamination caused by lid condensation. In addition, it prevents exposure of well contents to virus and bacteria.

6980A40	GAS PERMEABLE SEAL, Pk. 50	860.93
6980A42	GAS PERMEABLE SEAL, Cs. 200	219.35

LINBRO

NON-STERILE SEALING FILM

For for sealing microplates



6980A50 SEALING FILM, 100 Sheets \$56.50

- Gas permeable
 - Clear mylar
 - Adhesive-backed film
- Sheets are sized to cover entire surface of plate and provide positive seal of each individual well.

MULTIWELL PLATE ROLLER



6980A60

- Soft 4" rubber roller
- Roller can be removed from plastic hub and handle for easy cleaning. Provides gentle, even pressure while rolling sealing film onto well plates. Convenient hole in handle for hanging.

6980A60	MULTIWELL PLATE ROLLER, Ea.	\$25.50
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ELISA PLATE WASHER

Eight or twelve channel



6980C05

- Manufactured from autoclavable polysulfone
- 8 or 12 channel polyethersulfone (PES) for manually washing plates in either vertical or horizontal formats

The aspirator and wash tubes are stainless steel, with the longer aspirator tubes sheathed in Teflon™ to prevent scratching of well bottoms. Each

unit comes with a storage rack, flexible PVC tubing (two 6' pieces), two polypropylene tubing adapters and a steel cleaning wire.

6980C05	PLATE WASHER, 8-Channel	\$408.50
6980C10	PLATE WASHER, 12-Channel	465.00

NUNC

CELL HARVESTER

For Microwell Plates



6980F01

- Maintenance free
- Easy to clean
- Autoclavable

The cell harvester consists of a bottom unit with cannulae for washing plate wells and an upper unit for suction/withdrawal of solutions from microplates. A vacuum source is required. A glass fiber filter placed

between the units serves to trap suspended particles (for example, cells) for washing and eventual removal for further analysis, such as scintillation counting. Requires virtually no maintenance. Cleans easily. Support rack included. Order tubing kit and filter papers separately.

6980F01	CELL HARVESTER 6, Ea.	\$719.35
6980F02	TUBING KIT, Ea.	76.37
6980F05	GLASS FIBER FILTER PAPER, Pk. 100	39.32
6980F07	GLASS FIBER FILTER PAPER, Cs. 1200	471.63

Thomas Scientific

NUNC

MANUAL PLATE WASHERS

Specially designed coaxial cannulae eliminate overfilling and cross-contamination



6580F75 series

- Adjusts to fit any plate
- Inexpensive
- Adjustment screws for row alignment
- Storage rack included

Improved design makes washing well plates easier. Coaxial cannulae allow uniform and efficient washing. Adjustment screws and supplied ruler make for simple alignment of cannulae with the wells of any microplate. Select 8, 12 or 16 channel washers with included spare parts kit for easy maintenance. Autoclavable.

6980F15	MVLUAD WASHER 8, Ea.	\$467.35
6980F17	MVLUAD WASHER 12, Ea.	597.31
6980F19	MVLUAD WASHER 16, Ea.	673.33
6980F20	SPARE PARTS KIT	29.73
6980F23	CLEANING WARE	16.30

Double Warranty Protection

When you buy your laboratory instruments from us, you are protected in two ways. First, by the manufacturer's warranty and second, by the **Exclusive Thomas Scientific One Year Warranty** (see the introduction for details).

The **Thomas Warranty** provides that all instruments sold by us will be free from defects in materials and workmanship for one year from the date of our invoice to the buyer. We guarantee complete satisfaction products purchased from Thomas Scientific.

DIGITAL IMAGES

MICROPLATE WASHER™ AND FLUSHER™ SYSTEMS

- Process thousands of plates per day
- Perform gentle bottom washing to aggressive overflow washing
- Store up to 30 methods and nine plate types
- Maximum well evacuation with two-step (center-to-edge) aspiration
- Manage up to four different wash solutions per wash



6980F40

The Washer™ systems are designed for solid-bottom plates, and the Flusher™ systems are

designed for either solid-bottom or membrane filter bottom microtiter plates. Perfect for smaller labs as well as labs engaged in high throughput applications, these systems can handle thousands of plates per day. They are fast, accurate and flexible. Memory stores up to 30 wash programs for 9 plate sizes and types (solid or filter bottom, flat, round or conical wells, etc.). Built-in pumps dispense and aspirate two to four wash solutions, depending on the model and number of channels chosen. A selection of standard manifolds enables different wash patterns and special manifolds with long cannulae provide for very gentle cell-washing programs. Units have user-friendly keypad, RS 232 interface and take up only 12 x 18 x 9" (w x d x h) of bench space. Software allows for performing strip washes, skipping rows or whole or partial plates, from the most gentle bottom washing to the most aggressive overflow washing. Dispense height is adjustable to perform both bottom and top washing techniques. Built-in head aspiration prevents overflow contamination or allows up to 3000 mL per well overflow if so programmed. Interchangeable 96- and 384-well dispense heads help prevent equipment obsolescence. Dispensing speed is adjustable from drop mode to jet and different wash fluid viscosities can be accommodated by adjusting wash head speed. Included with washer are an autoclave, two-channel, eight-way manifold; two source bottles; and a waste bottle. Basic flusher includes the same, but requires a separate vacuum source. Tall and deepwell plates require spacers to elevate the manifold.

Washers

6980F40	WASHER, w2-Channel, 1 x 8-Way Manifold for 96-Well Solid Plates	\$6,750.00
6980F42	WASHER, w4-Channel, 1 x 8-Way Manifold for 96-Well Solid Plates	8,495.00
6980F46	WASHER, w2-Channel, 2 x 16-Way Manifold for 384-Well Solid Plates	8,495.00
6980F48	WASHER, w4-Channel, 2 x 16-Way Manifold for 384-Well Solid Plates	10,395.00

Flushers

6980F50	FLUSHER, w2-Ch, 1 x 8-Way Manifold for 96-Well Solid Filter Plates	\$10,495.00
6980F52	FLUSHER, w4-Ch, 1 x 8-Way Manifold for 96-Well Solid Filter Plates	12,195.00
6980F54	FLUSHER, w2-Ch, 2 x 16-Way Manifold for 384-Well Solid Filter Pts	15,200.00
6980F56	FLUSHER, w4-Ch, 2 x 16-Way Manifold for 384-Well Solid Filter Pts	14,995.00

Manifolds

6980F90	12-WAY MANIFOLD, for 96-Well Plates	\$996.00
6980F92	2 x 8-WAY MANIFOLD, for 96-Well Plates	1,325.00
6980F94	2 x 16-WAY MANIFOLD, for 384-Well Plates	1,950.00
6980F96	8-WAY MANIFOLD, With Long Cannulae, for 96-Well Plates	285.00
6980F98	12-WAY MANIFOLD, With Long Cannulae, for 96-Well Plates	1,679.00
6980F99	12 X 8-WAY MANIFOLD, With Long Cannulae, for 96-Well Plates	1,369.00
6980F92	2 x 16-WAY MANIFOLD, With Long Cannulae, for 384-Well Plates	2,149.00

NUNC

DNA LIBRARY REPLICATOR SYSTEM

Ideal for transferring small volumes of inoculum from MicroWell Source plates to other MicroWell reception plates in 384 or 96 well formats or to a membrane



6980H01

- Replicate plasmid, cosmid, cDNA and YAC libraries
- Condenses 96 well libraries to 384 well format; maximum well volume 120 μ L
- Inoculate filters for colony hybridization

Can make hundreds of library copies from a single master library due to the small transfer size of only 1 μ L when transferring liquid from plate to plate. Plate-to-membrane transfers require only 0.1 μ L. The replicators' pins are durable stainless steel and precision aligned to ensure long term performance even after repeated flame sterilization.

The MicroWell Plate Copier is a simple registration device for our replicators that allows

either 96- or 384 well libraries to be copied. It precisely registers the replicator pins to the wells with a unique system of alignment holes on the MicroWell Plate Copier and two guide pins on the replicators. The ease and precision of this alignment insures a contamination-free plate-to-plate transfer of cultures or clones.

The OmniTray Copier is a simple registration device that allows direct inoculation of colonies on agar or a nylon membrane contained in a Nunc OmniTray. It precisely registers the replicator pins to the agar or membrane with a system of alignment holes on the OmniTray Copier and two guide pins on the replicators. The alignment-hole patterns allow direct blot of four 384 well plates or nine 96 MicroWell plates on one transfer membrane or agar contained in an OmniTray. The ease and precision of this alignment insures a contamination-free plate-to-agar or membrane transfer of clones.

6980H01	384 PIN REPLICATOR, Ea	3914.41
6980H03	96 PIN REPLICATOR, Ea	634.40
6980H05	8'00YH [®] NYLON MEMBRANE, 4.5 x 2.9 in, Cl. 30	112.91
6980H07	MICROWELL PLATE COPIER, Ea	85.16
6980H09	OMNITRAY COPIER, Ea	105.93

TRANSFERABLE SOLID PHASE (TSP) IMMUNO TEST PLATE

Sterile with tray



6980H15

- TSP permits assay methods with simultaneous testing for two different analytes
- Sterilized TSP is available for screening hybridoma cultures for antibody production

TSP may be precoated with antigen, so the pins will only bind specific antibody when exposed to the cultures; does not require separate sampling of cultures and TSP can have no effect on the cultures. Individually wrapped.

6980H15	NUNC TSP PLATE, Cl. 30	\$195.10
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NUNC

OMNITRAY WITH LID, STERILE

Single well plate has same external dimensions as a 96 well plate



6980H20

- Radiation sterilized
- Designed for many uses
- Excellent optical clarity for viewing contents
- Compatible with robotic systems

Polystyrene tray can be used as a Petri dish, hybridization tray,

and for screening recombinant nucleic acid libraries. Tray can hold a hybridization membrane used for dot blotting bacterial clones. OmniTray's external dimensions are the same as a 96-well plate, making it compatible with robotic replicating systems. Dimensions: 86 mm x 128 mm. Compatible with Beckman Biomek, Tecan Trak, Orca, Zymark and Hybrid robotic systems.

6980H20	OMNITRAY WITH LID, STERILE, Cl. 90	\$82.47
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MICROPLATE WELL ORIENTER

6980J07

- Sharp alpha-numeric characters, enclosed in circles, identify each well

Plastic card goes under microplate allowing each well to be identified without cross referencing.

6980J01 WELL ORIENTER, Pk. 4 \$25.00

MICROPLATE WELL STAND

- Ergonomic time saver
- Tilts microplate and Well Orienter 30°
- Easily identify wells whether sitting or standing
- View and pipet without strain



6980J05

The well stand frees up one hand since it is no longer necessary to tilt plate back and forth while pipetting. Rubber feet and a neoprene sponge backing prevent stand from slipping.

6980J05 WELL STAND \$25.00

MICROPLATE WELL DESIGN LAYOUT PAD

- Pre-printed pad simulates 96-well microplate layout (A1 to H12)
- Provides room for comfortable notation for each well



The pad can be used for quick and easy reference to sample wells. The pad has a mild adhesive strip on the top so it can be affixed to a notebook page. Each pad contains 50, 7 x 5" sheets.

6980J07

6980J07 WELL PAD \$10.00

NICHROME INOCULATING LOOPS

Manufactured to critical tolerances



7010E01

- Twisted loops are 3" in length
- With aluminum handles
- Packaged individually in solid plastic boxes with caps to protect during shipping and storage

SPECIFICATIONS:

Thomas No.	B&S Wire Gauge	Loop I.D.	Aluminum Handle
7010E01	24 GA	3 mm	6 inches
7010E04	24 GA	4 mm	8 inches
7010E07	25 GA	5 mm	8 inches

7010E01 INOCULATING LOOP \$3.25

7010E04 INOCULATING LOOP 3.70

7010E07 INOCULATING LOOP 3.70