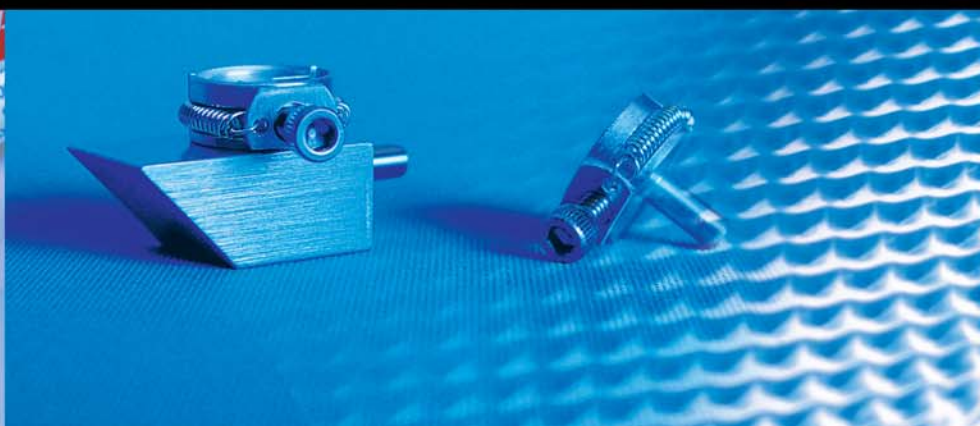


EMS Newsletter

January 2008



General Lab Supplies Microscopy Supplies Scanning Microscope Accessories
Histology Supplies Histology & Microscopy Equipment Cleaning Aids
Benchtop Cooling & Storage Labels, Printers, Tapes, & Dispensers



General Lab Supplies

► Glassine Weighing Dish

Weighing samples is made easier with these newly introduced Glassine Weighing Boats:



- No Static Build-Up – Glassine is free of static electricity that plagues disposable plastic weighing dishes.
- Contaminant Free – Pure glassine is an ultra-clean paper product
- Preformed 3.5" diameter Dish—convenient to use
- Color contrast – Chocolate-colored glassine reveals every particle of material
- Dish measures: 3.50" Dia x 0.5" Depth (87.5 x 13mm)

Ordering

Cat. #	Description	Qty.
70084-01	Glassine Weighing Dish	150/pk.
70084-CS	Glassine Weighing Dish	24pks/case

► Pipetter Guide – Sliding Guide

- Easily align a Pipetter with microplate wells using our Sliding Guide
- The Sliding Guide is clearly marked with row letters for fast and easy orientation
- Reduce eyestrain
- Adjust the guide height to accommodate flat or v-bottom microplate or PCR plates
- Compatible with multi-channel or single-channel pipettors



(70494-30 shown) with a 96-Well Color Orienter (70491-11) for added pipetting ease

Ordering

Cat. #	Description	Dimension	Qty.
70494-30	Single Place Sliding Guide	7 1/4 x 4 x 2	Each
70494-40	Double Wide Sliding Guide	13 1/4 x 4 x 2	Each

► PetriStickers™

Stickers for Labeling Petri Dishes

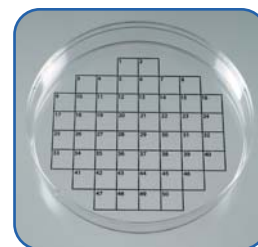
Label Petri dishes quickly, neatly, and reliably.

- Temperature Resistant – Labels remain firmly intact in temperatures from 4°C to 42°C
- Convenient – Instantly form an imprint Petri dish for quick reference, then remove if you wish
- Variety Pattern – Offering many choices to suit your work: Counting or Streaking

PetriStickers™ are 3" or 76 mm diameter.

Ordering

Cat. #	Layout	Qty.
70630-32	32 - Square Grid	36/pk.
70630-50	50 - Square Grid	36/pk.
70630-70	70 - Square Grids	36/pk.
70630-100	100 - Square Grids	36/pk.
70631-06	6 - Sector Pie	36/pk.
70631-08	8 - Sector Pie	36/pk.
70631-12	12 - Sector Pie	36/pk.
70631-16	16 - Sector Pie	36/pk.



► PetriSEAL™ and ContainerSEAL™

Ideal sealing Tapes for Petri Dishes, Microplates, Lids, Caps and other Lab Items.

- Conformity – Stretches, conforms and seals the irregular perimeter of microplates or Petri dishes
- Waterproof & Chemical Resistant – Tapes and adhesive resist most solvents and caustic agents
- Temperature Resistant – Seal remains flexible in moderate freezer temperatures and withstands intermittent exposure to 100°C



Ordering

Cat. #	Description/Color	Size	Qty.
70500-B	PetriSEAL, Blue	0.50 x 108	Roll
70500-C	PetriSEAL, Clear	0.50 x 108	Roll
70500-R	PetriSEAL, Red	0.50 x 108	Roll
70500-Y	PetriSEAL, Yellow	0.50 x 108	Roll
70500-W	PetriSEAL, White	0.50 x 108	Roll
70501-R	ContainerSEAL, Red	0.75 x 108	Roll
70501-W	ContainerSEAL, White	0.75 x 108	Roll
70501-Y	ContainerSEAL, Yellow	0.75 x 108	Roll



▶ Kimwipes Push-Up Box

This holder is a molded one-piece, hard plastic with a center island. Once the Kimwipes box is placed inside of this holder, Kimwipes will maintain in an up position until the last one is pulled out. Very handy for laboratory work bench, desk top or any work place.



Ordering

Cat. #	Description	Qty.
71603-01	Kimwipes Push-Up Box	Each
71603-02	Kimwipes Push-Up Box	2/pk.

▶ Disposable Bibulous Paper

- Highly absorbent white fiber paper
- Lint and dust free
- Recommended for drying microscope slides and other small lab glass items
- Size: 4 x 6



Ordering

Cat. #	Description	Qty.
70086-01	Disposable Bibulous Paper Book, each	50/pk.
70086-10	Disposable Bibulous Paper Book, 10 each	50/pk.

▶ Thirsty Stix

Sterile - Disposable - Absorbent filter paper sticks - great for absorbing, cleaning, and lubricating.



- Highly absorbent
- Adhesive, residue free
- Extremely low lint content
- Ideally to be used with the microtome to remove excess water from the boat
- Multiple uses
- Excellent to remove excess water or solution from tubes and plates
- Size: 6" long x 0.20" thick

Ordering

Cat. #	Description	Qty.
70996	Thirsty Stix	250/pk.

▶ The Richter Anti-Vibration Pad

- Cost Effective – An inexpensive solution which dampens vibrations generated from lab equipment
- Non-Slip – Creates a stable surface that will keep equipment in place
- Versatile – Fits a variety of bench-top vortexes, shakers, rockers and microscopes
- Portable – Small, lightweight design makes transportation between benches and labs easy
- Configurable – Pads can be stacked for heavier units or positioned side-by-side for larger equipment



Ordering

Cat. #	Pad Size	Qty.
67118-10	7.00" x 8.50"	2/pk.
67118-20	8.50" x 11.00"	2/pk.
67118-30	1 - 7.00" x 8.50", 1 - 8.50" x 11.00"	2/pk.

▶ Tissue Capture Pen

With one swift application of the EMS Tissue Capture Pen, you are able to change your plain glass slide into a coated one.

The EMS Tissue Capture Pen is a coating pen with a wide point (18mm) for fixing various tissue sections (paraffin embedded, frozen and formalin sections, etc.) The unique pen is unaffected by heat up to 120°C so it offers secure and firm adhesion of the tissue section. It may be used in Microwave staining, immunostaining, in situ etc....

One application is all that is needed, and after it is applied, allow to dry for 1-2 minutes.

The EMS Tissue Capture may be used in conjunction with our Pap-Pen (71310) and will allow for easy placement of adherent as well as non-adherent cells on a glass slide. Immunostaining/ISH can be performed by applying a few drops of tissue suspension or liquid media onto the glass slide which is circled by the Pap-Pen, and then your section can be placed.

Cat. #	Description	Qty.
71314-10	EMS Tissue Capture Pen	Each

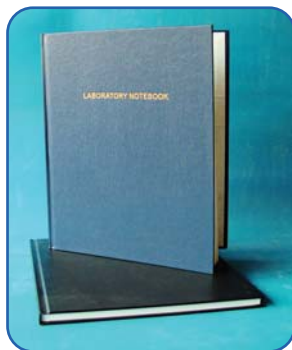
General Lab Supplies

► Notebooks, PolyPaper®

PolyPaper® is a Trademark of Nalgene® for a special spunbonded polyethylene "paper" designed for exceptional strength and resistance to moisture and chemicals. Records written or printed on PolyPaper® are virtually indestructible. PolyPaper® outperforms conventional papers, even with special coatings. It is unaffected by fresh or salt water. The non-absorbent, lint-free material resists mildew, tearing, fraying, curling, aging and discoloration. Chemical spills rinse off easily. PolyPaper® accepts any writing device. You can even write on it with No. 2 pencil under water.

► Laboratory Notebooks

Valuable notes and data are permanently secured in these hard cover, case-bound books – important for documenting research.



- Thick polyethylene cover, uncoated PolyPaper® pages
- Waterproof, and extremely chemical resistant
- 50 sheets are numbered and printed with a fine green 1/4", grid or horizontal 3 lines per inch
- Pages include spaces for dates and signatures of workers and witnesses, for securing patent protection, measures: 9 1/4" x 11 1/4" (235 x 286mm)
- Other pages include instructions for keeping research records, table of contents, and the page for issuing the notebook

Ordering

Cat. #	Mfr. #	Cover Color	Qty.
38020-10	6300-1000	Lab Notebook, Black	Each
38020-20	6300-2000	Lab Notebook, Blue	Each

► Spiral Field Notebook

Coated PolyPaper® pages – Blue polyethylene cover



- Flexible yet durable cover, with sheets permanently bound with spiral binding
- Chemical and moisture resistance ideal for fieldwork
- Pages are printed on both sizes with a fine green 1/4" grid and numbered 1 through 96
- Title and table of contents pages. Each page has space for date and signatures of workers and witnesses to research records
- Page measures 9" x 11 1/4" (229 x 286 mm)

Ordering

Cat. #	Mfr. #	Description	Qty.
38021-10	6303-1000	Field Notebook	Each

► Laboratory Paper Notebooks

Paper pages – Water Resistant Cover



- These notebooks feature permanently bound pages with grid lines
- Acid free pages with spaces for dates, title, project number, book number, and witness signatures
- Each Notebook contains periodic and conversion tables in the back
- Admissible as court evidence when used as prescribed by law
- Page measures: 8 1/2" x 11" (216 x 279 mm)

Ordering

Cat. #	Description	Qty.
38025-10	Laboratory Notebook, 100 pages	Each
38025-20	Laboratory Notebook, 200 pages	Each

► Well Orienter, Stand and Pad

For Easy Pipetting and Identification of Samples in Microplates



The Well Orienter

- Convenient visual aid for pipetting and identification of samples in microplates
- Sharp, alpha-numeric characters compatible with 96-, 48- or 24-well microplates
- No more cross-referencing headaches!

The Well Plate Stand

- View samples at a comfortable 30° angle and pipette without strain
- The neoprene pad and rubber feet prevents slippage of the plate and stand

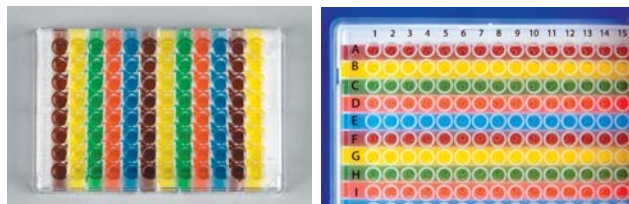
The Well Pad

- A convenient note pad that corresponds to the layout of a 96-, 48- or 24-well plate
- Keep accurate records of samples in a microplate
- Adhere sheets into a notebook to create a quick reference guide

Cat. #	Description	Qty.
70490-10	96 - Well Orienter	4/pk.
70490-11	48 - Well Orienter	4/pk.
70490-12	24 - Well Orienter	4/pk.
70490-20	Well Plate Stand	Each
70490-30	96 - Well Pad (7" x 5")	50/pad
70490-31	48 - Well Pad (7" x 5")	50/pad
70490-32	24 - Well Pad (7" x 5")	50/pad

► 96-well & 384-well Color Orienters

- Bright colors make it easy to distinguish between columns and rows
- Fits most standard flat and round bottom 96-well and 384-well plates
- Ideal for use with The Pipetter Guide for efficient and stress-free identification of rows and columns



Cat. #	Description	Qty.
70490-18	96 - well Vertical Orientation	2/pk.
70490-17	96 - well Horizontal Orientation	2/pk.
70490-16	384 - well Vertical Orientation	2/pk.
70490-15	384 - well Horizontal Orientation	2/pk.

► Adjustable Well Plate Stand

A Convenient, Adjustable-Angle Stand for Pipetting

- Achieves accurate pipetting by allowing the flexibility to adjust the angle of the microplate
- Convenient knob easily adjusts the angle (45° max. tilt) required to fully view every well
- Compact design takes up little bench-top space measuring only 6" L x 4 1/2" W x 2 1/2" H
- Durable acrylic material will last for years if properly cared for



Adjustable Well Plate Stand shown with a 96-well Color Orienter (sold separately).

Cat. #	Description	Qty.
70493-01	Adjustable Well Plate Stand	Each

► Well Orienter Stickers

- Permanently label multiple microplates
- Wells are clearly marked with its corresponding row number and column letter for quick cross-referencing
- Scored paper backing makes aligning quick and easy



The markings of each filled well are easily readable.

Cat. #	Description	Qty.
70490-14	96 - well Orienter Sticker	50/pk.

► Reagent Reservoirs

Disposable and Sterile

Unique – “Trough within a trough” maximizes reagent recovery.

Convenience – Pour-off spouts on all four corners.

Stable – A wide base and reinforced sidewalls avoids spills and provides stability.

Measurable – Graduated marks on inside wall.

Sterile – Sterilized by gamma irradiation.

Compatible – 25ml Reservoir with divider accommodates eight channel pipets on one side and one to four channel pipets on the other. The divider is also convenient for adding controls.

Options – Offered in bulk cases or individually wrapped (ideal for use in clean rooms).

Sidecar Reservoir* Features:

- “Two-in-One design” for precise reagent adding/mixing
- Ideal and efficient to use with small volume control and large volume test reagents
- “Sidecar” holds as little as 10ml of liquid or as much as 20ml



25ml reservoirs with divider (left) and without (right)



100ml Sidecar Reservoir

New Non-Sterile Cases of Reagent Reservoirs

Cat. #	Description	Qty.
70497-10	100ml Reservoir (NON STERILE)	100/case*
70497-20	25ml Reservoir w/ divider (NON STERILE)	100/case*
70497-30	25ml Reservoir (NON STERILE)	100/case*
70497-40	100ml Sidecar Reservoir (NON STERILE)	100/case*

Note: Each Case of 100 is packaged as 10 packs of 10 Reservoirs
* Patent Pending



Cat. #	Description	Qty.
70495-10	100ml Reservoir	100/case (10 pks. of 10)
70495-20	25ml Reservoir w/ divider	100/case (10 pks. of 10)
70495-30	25ml Reservoir	100/case (10 pks. of 10)
70495-40	100ml Sidecar Reservoir	100/case (10 pks. of 10)
70496-10	100ml Reservoir	50 individually wrapped
70496-20	25ml Reservoir w/ divider	50 individually wrapped
70496-30	25ml Reservoir	50 individually wrapped
70496-40	100ml Sidecar Reservoir	50 individually wrapped

General Lab Supplies

► Tri-Seal™ * Specimen Containers

Introducing the World's First Patented, Leakproof, Airtight, Touch-Top Specimen Containers for the Pathology Lab

Features:

- Triple Seal Design – Vials are “closed in the Mold” During Manufacturing
- Permanent Hinge – Allows for One-Hand Opening and Closing
- Patented Leakproof Touch-Top Construction Ideal for the Pathology Lab
- Molded from 100% High-Density, Translucent Polypropylene
- Available in a Variety of Sizes from 13 ml to 300 ml
- Locking Latch Option for optimum Security **
- No more Loose Threaded Screw Caps to deal with – Just Press Down the Triple-Seal Lid to securely Close and Seal

* Tri-Seal Containers are the product of 3GEN SCIENTIFIC

** Included in indicated products only



► The 4 Most Popular Styles for Pathology:

(These containers come with Locking Latch, except 15ml size)

Ordering

Cat. #	Description, (Overall Diameter x High)	Qty.
64234-15	Tri-Seal Container 15 ml, 1 3/8" x 2 1/2"	500/pk.
64234-15B	Tri-Seal Container 15 ml Bulk	2000/pk.
64234-90L	Tri-Seal Container 90 ml, 2 1/8" x 2 1/2"	400/pk.
64234-120L	Tri-Seal Container 120 ml, 2 3/8" x 2 1/2"	250/pk.
64234-240L	Tri-Seal Container 240 ml, 3" x 3"	140/pk.



64235-13

64235-50T

64235-50TL

64235-75T



64235-120TL

64235-240

64235-45TE

► The Other Tri-Seal Touch-Top Containers:

Ordering

Cat. #	Description, (Overall Diameter x High)	Qty.
64235-13	Tri-Seal Container 13 ml Tall, 15 x 95 mm	500/pk.
64235-50T	Tri-Seal Container 50 ml Tall, 28 x 84 mm	600/pk.
64235-50TL	Tri-Seal Container 50 ml Tall, 28 x 84 mm (with Locking Latch)	600/pk.
64235-75T	Tri-Seal Container 75 ml Tall, 33 x 93 mm	400/pk.
64235-90	Tri-Seal Container 90 ml Tall, 50 x 50 mm	400/pk.
64235-120	Tri-Seal Container 120 ml Tall, 63 x 50 mm	250/pk.
64235-120T	Tri-Seal Container 120 ml Tall, 43 x 90 mm	25/pk.
64235-120TL	Tri-Seal Container 120 ml Tall, 43 x 90 mm (with Locking Latch)	250/pk.
64235-240	Tri-Seal Container 240 ml Tall, 75 x 75 mm	150/pk.
64235-300TL	Tri-Seal Container 300 ml Tall, 30 x 80 mm (with Locking Latch)	100/pk.
64235-45TE	Tri-Seal Container 45 ml Tall, 30 x 80 mm (Tamper Evident Transport Container)	700/pk.

► Breathable Tube Membranes

Micro-permeable Membranes for Microtubes

- Ideal for cell growth and freeze drying
- Permits consistent gas exchange
- Easy microtube cap closure
- Will not bind in centrifuge rotors
- Easy-to-use finger tab for quick liner removal
- Pre-cut to fit a variety of popular tube sizes
- Sterile and free of cytotoxins

Cat. #.	Description	Qty.
70537-10	Breathe-EASY	100/pk.
70537-20	Breathe-EASIER	100/pk.



1

Remove the paper liner and adhere the membrane to the tube opening.



2

Remove the top protective layer to expose the breathable membrane

► Sealing Films

Pre-Cut-Adhesive Films For Microplate Sealing Needs

Sterile – Gamma irradiation ensures that sealing films are free of cytotoxins.

Prevent Contamination – Films eliminate well-to-well contamination, microbial and viral contamination, evaporation (excluding breathable membranes) and sample spillage.

Ideally Sized and Designed – 6" x 3.25" rectangles fit all microplates. Two scored end-tabs make film positioning and removal hassle-free.

Thermal Stability – Designed to withstand a wide temperature range.

Easy Specimen Retrieval – Pierceable sealing films facilitate easy removal of samples with a pipet tip.



Breathe-Easier membranes permit rapid, consistent gas exchange of Oxygen, CO₂ and Water Vapor for uniform cell growth.

Film Type	Breathe-Easy®	Breathe-Easier™	Titer-Tops®	AluminaSeal™	HotSeal™
Ideal Use	Cell Culture	Cell Culture	Misc Storage	Cold Storage	PCR
Temp. Range	-80°C to 100°C	-20°C to 80°C	-40°C to 100°C	-80°C to 110°C	-40°C to 125°C
Thickness	1 mil (0.001 in.)	5.5 mil (0.0055 in.)	4.4 mil (0.0044 in.)	2.7 mil (0.0027 in.)	2.3 mil (0.0023 in.)
Material	Polyurethane	Non-woven rayon	Polyethylene	Aluminum	Polyester
Gas-Permeable	Yes	Yes	No	No	No
UV Transparent	To 300nm	No	To 250nm	No	No

Ordering Information

Cat. #.	70536-10	70536-20	70538-10	70538-05	70534-10	70534-20
Qty.	100 sheets	100 sheets	100 sheets	50 sheets	100 sheets	100 sheets

► The B.O.P.® Kit* (Biopsy Organizer Plates)

Introducing the World's First Single Specimen Container for Multiple Endoscopic Biopsies

Simply stated, a BOP kit is a secure plate of specialized, easy to open and reseal biopsy specimen containers in an anatomical map format.

WHAT CAN A B.O.P KIT DO FOR MY GI DEPARTMENT?

- Streamlines and Simplifies submission of multiple biopsy specimens
- Saves time, effort and money
- Reduces the risk of misidentification of specimens
- Reduces storage space
- Maintains all patient's specimens in a single container

► The BOP Kit Light Box

An Essential Accessory for both GI/Endo Department and the Receiving Lab

1/ The BOP Kit Table Top Light Box:

Provides bright, even light for illuminating specimen containers and enhancing visualization for specimen retrieval via the 8" x 10" illumination area. Runs on "D" cell batteries or an AC Adapter (sold separately).

► The BOP Kit Slim Light Pad:

This light box is ultra thin, only 1/2" (14mm) thick. This new technology provides bright, even 5400K light for

illuminating specimen containers and easily finding even small specimen material with the clear plastic 8" x 10" illumination panel. 12 VAC adapter provided.

► The BOP Kit:

The BOP Starter Kit includes 1 case of 12 BOP Kits and 2 of the B.O.P Kit Table Top Light Box; one for use in the GI/Endoscopy specimen collection area, and the other for use in the laboratory for enhanced visualization in specimen retrieval.

* Product of 3GEN SCIENTIFIC – Designed by a pathologist

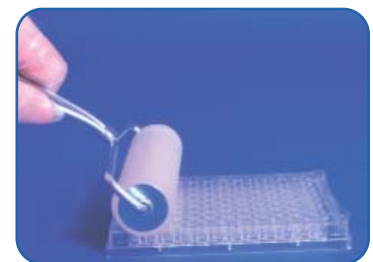


Cat. #	Description	Qty.
63920-01	BOP Starter Kit, 12 kit/cs with 2 Light Boxes	Each
63921-01	BOP Kit for Lower GI, 12 Kit/case	Each
63920-50	BOP Table Top Light Box	Each
63920-51	AC Adapter for Table Top Light Box	Each
63920-60	Slim Light Pad for BOP Kit w/Adapter	Each

► Microplate Brayer

Uniformly seal your films to microplates with this 4" Brayer. It's perfect for all your sealing films.

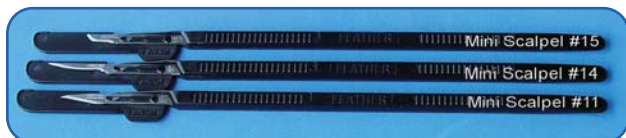
Cat. #.	Description	Qty
70534-40	Microplate Brayer	Each



Microscopy Supplies

► Disposable Mini Scalpel - Sterile

Feather® Disposable Mini Scalpels are made from heat-treated stainless steel. The blades are smaller than standard blades, come with chemical resistant, slender plastic handle. Handle is 5 7/8" (145mm) long. Available in three popular styles: #11, #14 and #15, and packaged in a sterile pouch, 20 per box. ISO 14001 compliant, ISO 9001 certified and ISO13485 certified.



Ordering

Cat. #	Description	Qty.
72041-11	Disposable Scalpel, Mini, #11	20/pk.
72041-14	Disposable Scalpel, Mini, #14	20/pk.
72041-15	Disposable Scalpel, Mini, #15	20/pk.

► Surgical Blade Remover

The **Feather® Surgical Blade Remover** is a palm-sized holder, designed for safe, hygienic removal of used blades from most types of scalpels. Holds between 150 to 300 used blades.



Ordering

Cat. #	Description	Qty.
72072-10	Feather® Blade Remover	10/pk.

► Stepped Microtome Embedding Mold

EMS Embedding Mold is a new mold designed with Michael J. Dykstra Ph.D. from North Carolina State University Department of Veterinary Medicine. This Mold produces blocks of the best dimension to be held securely by Reichert/Leica Ultracut stepped microtome chucks. There are 24 cavities and the depth of each cavity is 4mm which will prevent breakage of the blocks during razor blade trimming.

Mold Measurements: 3 3/8" x 3" (85 x 77mm)

Cavity Measurements: 15mm x 7mm x 4mm deep

Ordering

Cat. #	Description	Qty.
70907	Embedding Mold-Dykstra	Each

► Feather® Safeshield™

Disposable Scalpel – Sterile

Made from heat-treated stainless steel, these scalpels are excellent for delicate precise procedures. They fit the hand comfortably and are designed with safety in mind. They reduce injury and transmitted disease from contaminated blades. They feature a clear protective, retractable shield and have a color coded button on the protective shield which assists with blade size identification.

Individually packaged, 10 per box.



Ordering

Cat. #	Description	Qty.
72043-10	Feather® Safeshield™ Blade #10	10/pk.
72043-11	Feather® Safeshield™ Blade #11	10/pk.
72043-14	Feather® Safeshield™ Blade #14	10/pk.
72043-15	Feather® Safeshield™ Blade #15	10/pk.
72043-15C	Feather® Safeshield™ Blade #15C	10/pk.
72043-20	Feather® Safeshield™ Blade #20	10/pk.
72043-21	Feather® Safeshield™ Blade #21	10/pk.
72043-22	Feather® Safeshield™ Blade #22	10/pk.
72043-23	Feather® Safeshield™ Blade #23	10/pk.
72043-24	Feather® Safeshield™ Blade #24	10/pk.
72043-25	Feather® Safeshield™ Blade #25	10/pk.

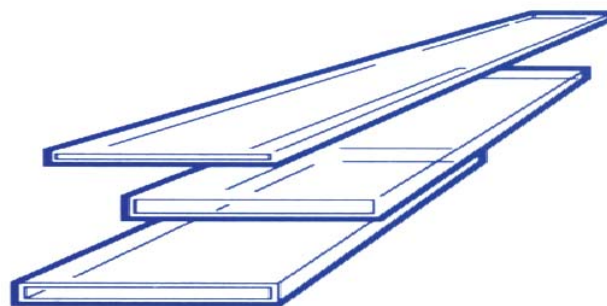


► Borosilicate Capillary Micro Glass Slide

Made from Corning® 7740 borosilicate, low expansion, type I glass.

Micro glass slides are precision rectangular glass capillary tubes for use in microscopic viewing of liquid samples. Capillary action instantly collects the sample and the thin glass walls minimize evaporation. The design of these cells eliminates the needs for cover glass and the hanging drop method. These micro glass slides can withstand heat up to 500°C. Samples can be retained for future reference by sealing or cementing open ends. Micro glass slides are packaged in plastic vials.

I.D. tolerance ± 10%, Wall tolerance ± 20%



TECHNICAL

CORNING® Glass 7740

Common Names - Borosilicate, Low Expansion, Type I Glass

Standards - Type I, Glass A Borosilicate conforming to federal specification DD-G-541b and ASTM E-438. Also meets the U.S. Pharmacopodia specs for Type I Borosilicate Glass.

Composition:	% Approximate
SiO ₂	80.6
B ₂ O ₃	10
Na ₂ O	4.0
Al ₂ O ₃	2.3
Misc. Traces	0.1
Properties:	
Coeff. Of Exp.	32.5 x 10 ⁻⁷ cm/cm/°C
Strain Point	510 °C
Anneal Point	560 °C
Soften Point	821 °C
Density	2.23 g/cm ²
Youngs Mod	6.4 x 10 ³ Kg/mm ²
Refract Index	1.74 @ Sodium D Line
Temp Limits	490°C (Extreme service) 230°C (Normal Service)
Max. Thermal Shock	160 °C

Cat. #	Dimensions		Wall Thickness	Length mm	Qty.
	ID. mm	Path x Width			
Standard Micro Glass Slides					
63820-05	0.02 x 0.2		0.020	50	30/vial
63820-10	0.02 x 0.2		0.020	100	30/vial
63821-05	0.03 x 0.3		0.025	50	33/vial
63821-10	0.03 x 0.3		0.025	100	33/vial
63822-05	0.04 x 0.4		0.030	50	36/vial
63822-10	0.04 x 0.4		0.030	100	36/vial
63823-05	0.05 x 0.5		0.040	50	44/vial
63823-10	0.05 x 0.5		0.040	100	44/vial
63824-05	0.10 x 1.0		0.090	50	40/vial
63824-10	0.10 x 1.0		0.090	100	40/vial
63825-05	0.20 x 2.0		0.150	50	36/vial
63825-10	0.20 x 2.0		0.150	100	36/vial
63826-05	0.30 x 3.0		0.300	50	31/vial
63826-10	0.30 x 3.0		0.300	100	31/vial
63827-05	0.40 x 4.0		0.400	50	28/vial
63827-10	0.40 x 4.0		0.400	100	28/vial
63828-10	0.50 x 5.0		0.300	100	14/vial
63829-10	0.60 x 6.0		0.400	100	12/vial
63830-10	0.70 x 7.0		0.460	100	9/vial
63831-10	0.80 x 8.0		0.540	100	7/vial
63832-10	0.90 x 9.0		0.600	100	6/vial
63833-10	1.00 x 10.0		0.670	100	4/vial
63840-05	0.05 x 1.0		0.030	50	50/vial
63840-10	0.05 x 1.0		0.030	100	50/vial
63841-05	1.10 x 2.0		0.100	50	45/vial
63841-10	1.10 x 2.0		0.100	100	45/vial
63842-05	0.20 x 4.0		0.150	50	36/vial
63842-10	0.20 x 4.0		0.150	100	36/vial
63843-05	0.30 x 6.0		0.300	50	24/vial
63843-10	0.30 x 6.0		0.300	100	24/vial
63844-05	0.40 x 8.0		0.400	50	18/vial
63844-10	0.40 x 8.0		0.400	100	18/vial

Microscopy Supplies

► Fixatives for Microscopy:

1. Formaldehyde (Methanol Free) in new concentrations

Formaldehyde Solution (Paraformaldehyde Solution), EM Grade

Paraformaldehyde – methanol free solution. A more efficient and rapid penetrant fixative used in combination with Glutaraldehyde and Acrolein fixatives. Easy to break, prescored, 10ml ampoules sealed under inert gas, or 100ml bottles.



Cat. #	Description	Qty.
15700	16% Paraformaldehyde (formaldehyde) solution	10ml
15710	16% Paraformaldehyde (formaldehyde) solution	10x10ml
15710-S	16% Paraformaldehyde (formaldehyde) solution	100ml bottle
15711	16% Paraformaldehyde (formaldehyde) solution	10x10ml
15712	10% Paraformaldehyde (formaldehyde) solution	10x10ml
15712-S	10% Paraformaldehyde (formaldehyde) solution	100ml
15713	20% Paraformaldehyde (formaldehyde) solution	10x10ml
15713-S	20% Paraformaldehyde (formaldehyde) solution	100ml
15714	32% Paraformaldehyde (formaldehyde) solution	10x10ml
15714-S	32% Paraformaldehyde (formaldehyde) solution	100ml

In addition to our complete line of Formaldehyde solutions shown above we have now added to the line.

Since the DOT (Department of Transportation) has changed the definition of what a non dangerous solution of formaldehyde is to under 10%, we are now offering an 8% and a 4% solution. This will allow us to ship overnight as well as overseas without any hazardous charges saving our customers a good deal of money.

The quality of our 8% and 4% aqueous Paraformaldehyde solution is as good as all of the other concentrations that we offer.

Cat. #	Description	Qty.
157-4	4% Paraformaldehyde Aqueous Solution	10x10ml
157-8	8% Paraformaldehyde Aqueous Solution	10x10ml
157-4-100	4% Paraformaldehyde Aqueous Solution	100ml
157-8-100	8% Paraformaldehyde Aqueous Solution	100ml

2. Perfusion Wash and Perfusion Fixative Ready to use

For all of the best results we offer ready to use Perfusion washes and fixatives which are recommended by the NeuroScience Association. All of our solutions are ready made and are of the highest quality.

We have three groups of solutions commercially available.

Group I : Perfusion wash and Fixative Technical Grade. To be used for Standard stains:

Perfusion Wash (1220SK): Phosphate Buffered Saline 0.1M Phosphate Buffer pH 7.2-7.4

Perfusion Fixative(1221SK): 10% Phosphate Buffered Formaldehyde

Group II: Perfusion wash and Fixative Reagent Grade. To be used for Standard and ImmunoHistochemistry Stains.

Perfusion Wash (1219SK): Phosphate Buffered Saline 0.1M Phosphate Buffer pH 7.2-7.4

Perfusion Fixative (1224SK): Paraformaldehyde 4%/Sucrose 4% in Phosphate Buffer 0.2M Ph 7.2

Group III: Perfusion wash and Fixative Superior Reagent Grade.

For the best results use this group. This is Sodium cacodylate based for NSA'S Disintegrative Degeneration Stain

Perfusion Wash (1222SK): 0.8% NaCl/0.4% Dextrose/0.8% Sucrose/ 0.023% CaCl₂ /Sodium

Cacodylate 0.034%

Perfusion Fixative (1223SK): 4% Paraformaldehyde/4% Sucrose/ 1.4% Sodium Cacodylate

For a complete procedure and protocol for the use of these washes and fixatives please see the following site: www.neuroscienceassociates.com/perf-solution1 or 2 or 3.htm

Ordering

Cat. #	Description	Qty.
1220SK	Perfusion Wash, Technical	1000 ml
1221SK	Perfusion Fixative, Technical	1000 ml
1219SK	Perfusion Wash, Reagent	1000 ml
1224SK	Perfusion Fixative, Reagent	1000 ml
1222SK	Perfusion Wash, Super Reagent	1000 ml
1223SK	Perfusion Fixative, Super reagent	1000 ml

If you want a custom wash or fixative made please just let us know and we will be happy to make you whatever you require

► Conductance Embedding Media

A two component resin based on modified methyl methacrylate and conducting carbon powder. The polymerized resin gives excellent adhesion to the embedded material and homogeneous conductivity. This embedding resin is good for SEM, microprobe specimen, and specimens to be electro polished. The kit consists of 1kg of component A Powder and 500 ml components B Liquid.

Ordering

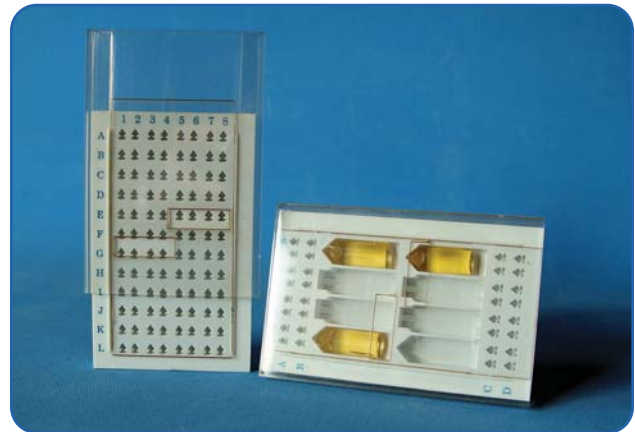
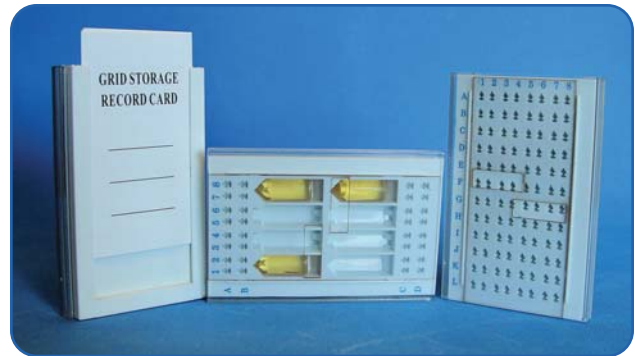
Cat. #	Description	Qty.
13960	Conductance Embedding Kit	1 kilo

► Multipurpose Electron Microscope Specimen Box – MEM Grid Box

A newly designed Grid Box with safety, ease and convenience in mind – this multipurpose electron microscope specimen grid box is one of the most desirable boxes on the market.

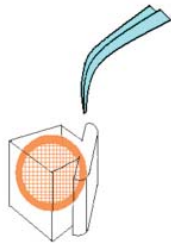
- Eliminates the chances of tweezer insertion damaging the grids – The ‘tweezers slot’ and ‘grid slot’ are in a separate location. The tweezers are only able to grip the edge of the grid enabling it to be picked up
- Grids stored no longer jump out of the box while you remove the cover – Between the body of the box and the sliding lid, there is a separate plastic cover, which allows for only four slots being exposed at a time
- The Grid Record Card is stored safely by insertion along the reverse side of the box
- MEM-96 – will able to store up to 96 grids
- MEM-32 – will able to store up to 32 grids with 8 Blocks
- Measures: 81mm L x 54mm W x 6mm thick

Cat. #	Description	Qty.
71164-01	MEM-96 Grid Storage Box	Each
71164-10	MEM-96 Grid Storage Box	10/pk.
71165-01	MEM-32 Grid Storage Box	Each
71165-10	MEM-32 Grid Storage Box	10/pk.



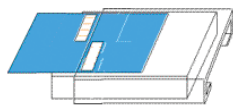
1. Pick up a grid

Removes the problem of inserting the tweezers too deep or damaging the tissues. The tweezer slot and grid hole connect. The tweezers insertion slot grips the edge of the grid, so does not damage the tissues and membrane.



2. Move Plastic sheet

Prevents grids from jumping out of the grid hole and mixing together. Between the body of the box and lid, there is a plastic cover piece so that when you pick up the grid, only four grid holes are exposed at once; the others remain covered by the plastic cover piece and lid.



Safeguards against loss of samples, or information of stored samples becoming separated.

3. Record Card

Three different components (semi-thin section, thin section, block) and record card are all stored in one box (MEM-32grid-8block). You can find everything and store all of your samples in one box.



1. Record card is stored underneath the box
2. When moving lid and plastic cover pieces only four holes are exposed at once
3. The tweezers insertion slot grips the grid edge
4. Slot grids should best be gripped by curved tweezers. Mesh grids can be gripped by straight or curved tweezers.
5. MEM-96grid contain 96 grids (left) MEM-32grid-8block contain 32 grids and 8 blocks (middle).
6. Small semi-thin section can be stored by sliding into the block cavity (right).

Microscopy Supplies

► C-flat™ Holey Carbon Grids for cryo-TEM

The premier holey carbon grid for cryo-transmission electron microscopy

C-flat™ is an ultra-flat, holey carbon-coated TEM support grid for transmission electron microscopy (TEM). Unlike competing holey carbon films, C-flat™ is manufactured without plastics, so it is clean upon arrival and the user has no residue to contend with.

The C-flat™ Advantage

C-flat™ leads to better data sets.

Made with patent pending technology, C-flat™ provides an ultra-flat surface that results in better particle dispersion and more uniform ice thickness. Patterning is done using deep-UV projection lithography, ensuring the most accurate and consistent hole shapes and sizes down to submicron features. The precise methods by which C-flat™ is manufactured eliminate artifacts such as excess carbon and edges around holes.

C-flat™ is affordable

C-flat™ is available in 25, 50, and 100 packs at a per-grid price less than competing products.

Applications

C-flat™ holey carbon grids provide the ideal specimen support to achieve high resolution data in cryo-TEM making them an ideal choice for single particle analysis, cryo electron tomography and automated TEM analysis.

Cryo-electron tomography (cryoET) and Single Particle Analysis (SPA):

Numerous researchers have reported that the ultra-flat surface of C-flat™ leads to even ice thickness and uniform particle distribution within the hole areas. This optimal particle distribution results in superior data being collected as compared with other holey support films. 2µm hole sizes are standard but custom hole sizes are available so C-flat™ can accommodate the common magnifications used for quantitative TEM analysis.

Automated TEM:

C-flat™ provides a regular array of analysis sites compatible with automated data collection software such as Legion. This compatibility, in combination with the more uniform ice thickness and particle distribution reported by numerous researchers, results in more high-quality target sites per grid.

Publications using C-flat™:

Does contamination buildup limit throughput for automated cryoEM, *Journal of Structural Biology*, Volume 154, Issue 3, June 2006, Pages 303-311, Anchi Cheng, Denis Fellmann, James Pulokas, Clinton S. Potter and Bridget Carragher

Automated cryoEM data acquisition and analysis of 284 742 particles of GroEL, *Journal of Structural Biology*, In Press, Uncorrected Proof, Available online 22 May 2006, Scott M. Stagg, Gabriel C. Lander, James Pulokas, Denis Fellmann, Anchi Cheng, Joel D. Quispe, Satya P. Mallick, Radomir M. Avila, Bridget Carragher and Clinton S. Potter

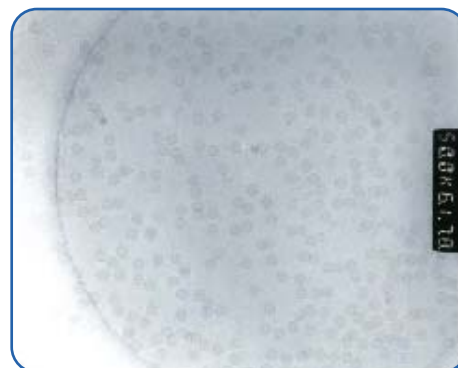
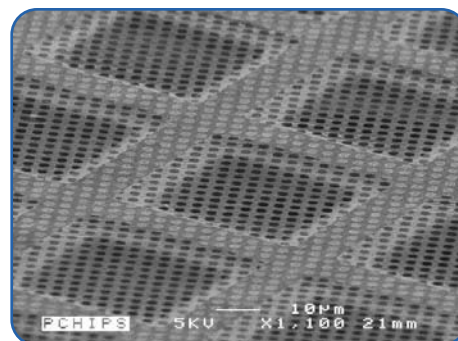
Product Line

C-flat™ is a holey carbon film supported by a standard TEM grid. C-flat™ products are fully specified by 4 parameters: the hole diameter and pitch of the holey carbon film and the material type and mesh size of the TEM grid. The image at right illustrates these parameters

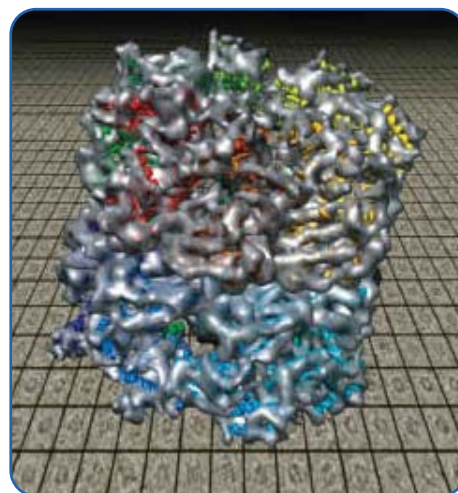
Standard Products

The breadth of applications in cryoTEM necessitates a wide range of holey carbon film patterns. And now, with the recent expansion of the product line, a C-flat™ holey carbon film is available for almost any application. Whether 600nm holes are needed for very high magnifications with ultra-high resolution cameras or large open areas are needed for larger specimens, C-flat™ is the perfect holey carbon grid.

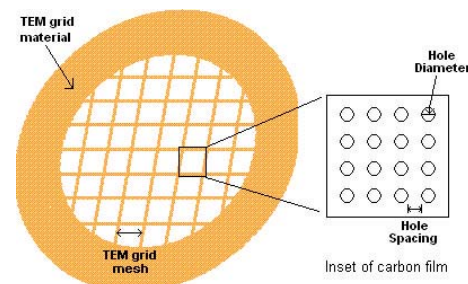
C-flat™ is immediately available in several standard array patterns including hole diameters/hole spacings of 0.6/2, 1/1, 1/2, 1/4, 1.2/1.3, 2/1, 2/2, 2/4, 4/2, and a multihole pattern. C-flat™ is supported by your choice of a 200 mesh or 400 mesh copper TEM grid and sold in quantities of 25, 50, or 100.

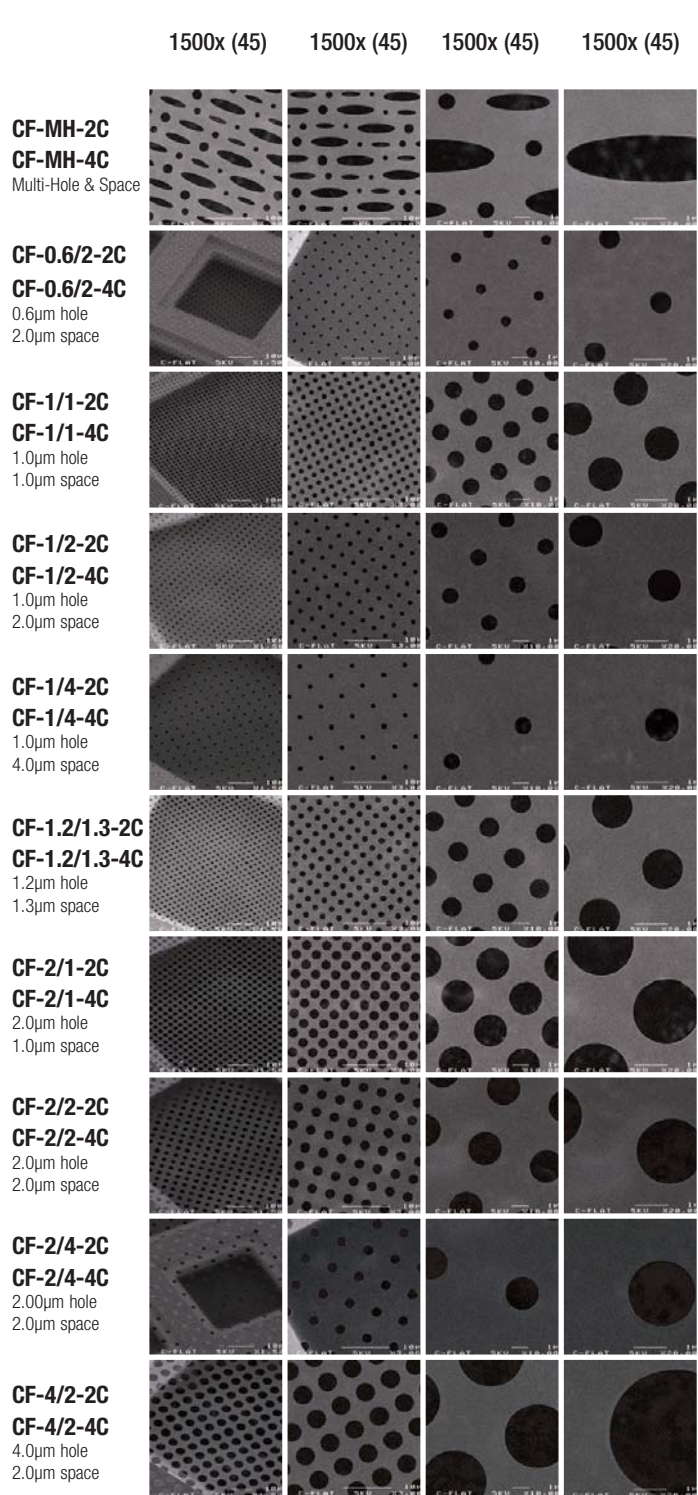


Frozen-Hydrated Bacteriophage Capsid
(data acquired on CF-1.2/1.3-4C)



250,000 particles of GroEL in 24 hours.
Image Courtesy of Scott Stagg and Mike Pique
NRAMM, The Scripps Research Institute
(data acquired on CF-2/2-4C)





C-flat™ mounted on a stub using carbon tape and imaged with a Field Emission Scanning Electron Microscope

Product Code	Cat. #	Hole Size	Hole Spacing	TEM Mesh	TEM Grid	Qty.
CF-1.2/1.3-2C	CF213-25	1.2 µm	1.3 µm	200	Cu	25/pk.
	CF213-50	1.2 µm	1.3 µm	200	Cu	50/pk.
	CF213-100	1.2 µm	1.3 µm	200	Cu	100/pk.
CF-1.2/1.3-4C	CF413-25	1.2 µm	1.3 µm	400	Cu	25/pk.
	CF413-50	1.2 µm	1.3 µm	400	Cu	50/pk.
	CF413-100	1.2 µm	1.3 µm	400	Cu	100/pk.
CF-2/1-2C	CF212-25	2.0 µm	1.0 µm	200	Cu	25/pk.
	CF212-50	2.0 µm	1.0 µm	200	Cu	50/pk.
	CF212-100	2.0 µm	1.0 µm	200	Cu	100/pk.
CF-2/1-4C	CF412-25	2.0 µm	1.0 µm	400	Cu	25/pk.
	CF412-50	2.0 µm	1.0 µm	400	Cu	50/pk.
	CF412-100	2.0 µm	1.0 µm	400	Cu	100/pk.
CF-2/2-2C	CF-222C-25	2.0 µm	2.0 µm	200	Cu	25/pk.
	CF-222C-50	2.0 µm	2.0 µm	200	Cu	50/pk.
	CF-222C-100	2.0 µm	2.0 µm	200	Cu	100/pk.
CF-2/2-4C	CF-224C-25	2.0 µm	2.0 µm	400	Cu	25/pk.
	CF-224C-50	2.0 µm	2.0 µm	400	Cu	50/pk.
	CF-224C-100	2.0 µm	2.0 µm	400	Cu	100/pk.
CF-2/4-2C	CF242-25	2.0 µm	4.0 µm	200	Cu	25/pk.
	CF242-50	2.0 µm	4.0 µm	200	Cu	50/pk.
	CF242-100	2.0 µm	4.0 µm	200	Cu	100/pk.
CF-2/4-4C	CF442-25	2.0 µm	4.0 µm	400	Cu	25/pk.
	CF442-50	2.0 µm	4.0 µm	400	Cu	50/pk.
	CF442-100	2.0 µm	4.0 µm	400	Cu	100/pk.
CF-4/2-2C	CF422-25	4.0 µm	2.0 µm	200	Cu	25/pk.
	CF422-50	4.0 µm	2.0 µm	200	Cu	50/pk.
	CF422-100	4.0 µm	2.0 µm	200	Cu	100/pk.
CF-4/2-4C	CF424-25	4.0 µm	2.0 µm	400	Cu	25/pk.
	CF424-50	4.0 µm	2.0 µm	400	Cu	50/pk.
	CF424-100	4.0 µm	2.0 µm	400	Cu	100/pk.
CF-MH-2C	CF2MH-25	Multihole*		200	Cu	25/pk.
	CF2MH-50	Multihole*		200	Cu	50/pk.
	CF2MH-100	Multihole*		200	Cu	100/pk.
CF-MH-4C	CF4MH-25	Multihole*		400	Cu	25/pk.
	CF4MH-50	Multihole*		400	Cu	50/pk.
	CF4MH-100	Multihole*		400	Cu	100/pk.
CF-0.6/2-2C	CF20.6-25	0.6 µm	2.0 µm	200	Cu	25/pk.
	CF20.6-50	0.6 µm	2.0 µm	200	Cu	50/pk.
	CF20.6-100	0.6 µm	2.0 µm	200	Cu	100/pk.
CF-0.6/2-4C	CF40.6-25	0.6 µm	2.0 µm	400	Cu	25/pk.
	CF40.6-50	0.6 µm	2.0 µm	400	Cu	50/pk.
	CF40.6-100	0.6 µm	2.0 µm	400	Cu	100/pk.
CF-1/1-2C	CF21-25	1.0 µm	1.0 µm	200	Cu	25/pk.
	CF21-50	1.0 µm	1.0 µm	200	Cu	50/pk.
	CF21-100	1.0 µm	1.0 µm	200	Cu	100/pk.
CF-1/1-4C	CF41-25	1.0 µm	1.0 µm	400	Cu	25/pk.
	CF41-50	1.0 µm	1.0 µm	400	Cu	50/pk.
	CF41-100	1.0 µm	1.0 µm	400	Cu	100/pk.
CF-1/2-2C	CF22-25	1.0 µm	2.0 µm	200	Cu	25/pk.
	CF22-50	1.0 µm	2.0 µm	200	Cu	50/pk.
	CF22-100	1.0 µm	2.0 µm	200	Cu	100/pk.
CF-1/2-4C	CF42-25	1.0 µm	2.0 µm	400	Cu	25/pk.
	CF42-50	1.0 µm	2.0 µm	400	Cu	50/pk.
	CF42-100	1.0 µm	2.0 µm	400	Cu	100/pk.
CF-1/4-2C	CF24-25	1.0 µm	4.0 µm	200	Cu	25/pk.
	CF24-50	1.0 µm	4.0 µm	200	Cu	50/pk.
	CF24-100	1.0 µm	4.0 µm	200	Cu	100/pk.
CF-1/4-4C	CF44-25	1.0 µm	4.0 µm	400	Cu	25/pk.
	CF44-50	1.0 µm	4.0 µm	400	Cu	50/pk.
	CF44-100	1.0 µm	4.0 µm	400	Cu	100/pk.

* The Multihole device has a staggered pattern of six features consisting of three circle patterns of 1 micron, 1.4 micron and 2 micron diameter and three ellipse patterns of 1x4 microns, 1.4x5.6 microns and 2x8 microns.

Scanning Electron Microscope Accessories

► LuminiX ScintillatoR – LXSR

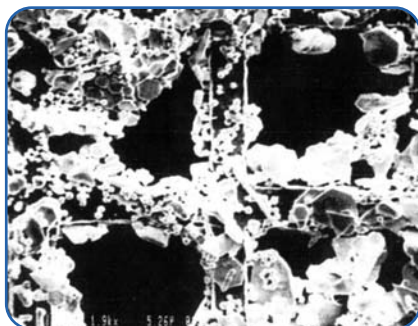
LXSR is a newly introduced single crystal scintillator offering the following advantages:

- More signal than phosphor (P47), YAP, and YAG – higher resolution
- Made in the USA
- Very good radiation hardness leading to long lifetime

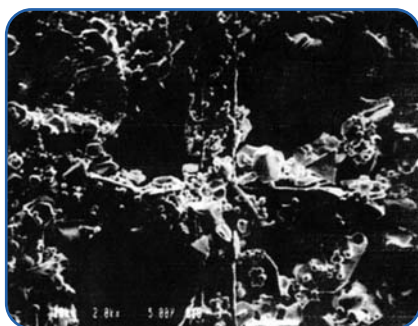
	LXSR	YAP:Ce
Light Output (%NaI)	80	40
Decay Constant	35 ns	~25 – 30 ns
Peak Emission	420 nm	370 nm
Index of Refraction	1.80	1.95
Density	4.45	5.55
Hygroscopic	NO	NO

The standard thickness for LXSR is 1 mm; however, other thicknesses can be made to order. (Thinner material will decrease internal absorption and yield greater light output.) The polished face is coated with a thin layer of aluminum and the back has a matte finish unless otherwise requested. LXSR works well in SEMs and other instruments requiring scintillators.

In fact, surface contamination from your instrument is the most likely reason for a reduction in output. At this point refurbishing is needed, including strip, clean and recoat aluminum.



LuminiX ScintillatoR



YAP: Ce ScintillatoR

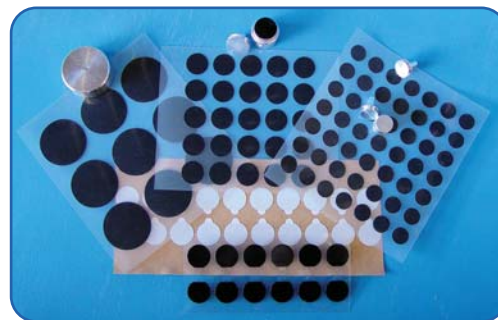
Ordering

Cat. #	Description	Qty.
82095	Luminix Scintillator	Each
82095-R	Refurbishing Luminix	Each

► Conductive Carbon Adhesive Tabs

Standard Carbon Conductive Adhesive Tabs – Tabs are formed by two sides of thick conductive adhesive (45 μm on each side) with the center conductive core film (35 μm). With the total thickness of 125 μm , these tabs will offer reasonably firm, smooth surfaces for a variety of SEM applications, including gunshot residue analysis. Tabs are protected by white liners, which do not have to be removed when samples are ready to be mounted.

- No gas out-gassing
- Conductive adhesive is carbon filled acrylic glue
- Solvent free
- Adhesive can be removed by ethyl acetate, ethanol, isopropyl alcohol or alcohols
- Service temperature is up to 60°C (140°F)



Tabs contain some traces of Si, Sb, S, Fe, Mg, Na.

Thick Carbon Conductive Tabs or Image Tabs – The stiff and smooth surface conductive tabs are 260 μm thick, including 200 μm thick conductive carbonate base, coated 30 μm thick on each side with conductive adhesive. However, these tabs are not as conductive and sticky as the Standard Carbon Conductive Tabs. Thick Carbon Conductive Tabs are used for photographic background as well as for Jet Scan applications, where the tabs must be removed and filed away.

Ultra-Thin Carbon Conductive Adhesive Tabs – These tabs have Core material which is nonconductive cloth (70 μm) with Carbon Filler Conductive Adhesive (2 x 45 μm). Total thickness is 160 μm .

Spectro Grade Carbon Adhesive Tabs – High purity conductive carbons for less interference signals, such as X-Ray analysis.

Ultra-Smooth Carbon Adhesive Tabs – Carbon adhesive tabs that eliminate issues with rough surfaces, insufficient tackiness, and hardness with significantly lower contaminant levels under EDS. Tabs are made in USA and very popular, and may be used in place of other conductive adhesive in many applications in conventional and field emission microscopes. They are also widely used in forensic laboratories for study of gunshots residues. Without the addition of conductive coating, small nonconductive particles can often be imaged and X-Ray analyzed, cutting down your analysis time. These tabs are composed of a thin film of strong adhesive approximately 1/2" diameter. Over 99% transparent to EDS, with a very small amount of nickel (0.6%) and copper (< 0.3%).

Refrigeration will increase shelf life but tabs need to be warmed up to room temperature before use (usually more than one hour)

Ordering

Cat. #	Description	Qty.
77825-06	Standard Carbon Adhesive Tabs, 6mm Dia.	100/pk.
77825-09	Standard Carbon Adhesive Tabs, 9mm Dia.	98/pk.
77825-12	Standard Carbon Adhesive Tabs, 12mm Dia.	100/pk.
77825-25	Standard Carbon Adhesive Tabs, 25mm Dia.	54/pk.
77824-12	Thick Carbon Conductive Tabs, 12mm Dia.	100/pk.
77825-12-SP	Ultra Thin Carbon Adhesive Tabs, 12mm Dia.	200/pk.
77826-12	Spectro Grade Carbon Adhesive Tabs, 12mm Dia.	120/pk.
77827-12	Ultra-Smooth Carbon Adhesive Tabs, 12mm	100/pk.
77827-25	Ultra-Smooth Carbon Adhesive Tabs, 25mm	50/pk.

Scanning Electron Microscope Accessories

► FIB Sample Holder

Fortress™ FIB Holder with CastleGuard™ Protection

Fortress™ FIB Holders are reusable holders that secure FIB sample that are held in a specific orientation without the use of adhesives, adhesive tabs, or conductive paints. Fortress™ FIB Holders can be used to position a thin, whole or cut TEM grid / disk in an orientation such that either in-situ or an ex-situ. FIB lift-out technique can be used to attach a FIB-prepared sample. Physical protection of the mounted sample on the grid is provided with the CastleGuard™ protection design. Up to 30 Fortress FIB Holders can be stored in a single SS200 Sample Saver™ storage container.

Features:

- Unique clamping mechanism secures sample without over tightening
- Standard 1/8" pin mount fits most FIBs and SEMs
- Peripheral support structure protects specimens during handling and transport
- Economical design enables user to prepare and store samples on the same holder
- Compatible with Sample Saver™ Storage containers for secure storage and transport in an inert environment

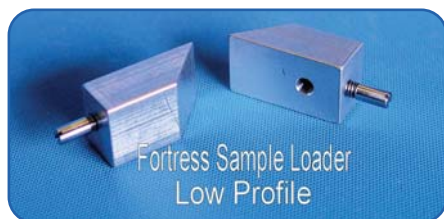
► Fortress™ FIB Holder – Low Profile

Low Profile Fortress™ FIB Holder to hold either a standard FIB lift out specimen on a grid or an H-Bar cut Sample.



► Fortress™ Sample Loader

Securely holds the Fortress™ Low Profile holder under a stereomicroscope and permits viewing from 2 angles without changing focus on the microscope.



Ordering

Cat. #	Description	Qty.
75956-01	FIB sample Holder for Low Profile	Each
75956-50	Fortress™ Sample Loader for Low Profile	Each

► Fortress™ FIB Holder – High Profile

High Profile Fortress™ FIB Holder to hold a standard FIB lift-out specimen on a grid.

► Fortress™ Sample Loader

Securely holds the Fortress™ High Profile holder under a stereomicroscope and permits viewing from 2 angles without changing focus on the microscope.



Ordering

Cat. #	Description	Qty.
75957-01	FIB sample Holder – High Profile	Each
75957-50	Fortress™ Sample Loader for High Profile	Each

EMS offers the breakthrough solutions of QuantomiX's proprietary WETSEM™ Technology

now available at half price...



...for a limited time

QUANTOMIX™

Please contact EMS for more details.

Histology Supplies



► RDO Rapid Decalcifier

RDO and RDO Gold were developed with the basic premise of making your work routine quicker and easier without sacrificing the quality and integrity of your samples.

RDO and RDO Gold are remarkably effective multipurpose decalcifiers that can be tailored to suit your specific lab routine.

Both RDO and RDO Gold:

- Offer crisp nuclear staining and definition
- Give distinguishable chromatin
- Show great surface decalcification
- Safe enough to be disposed down to lab sink to drain

How is RDO Gold different from the original RDO

- RDO Gold is designated for those biopsies which contain minimal amounts of calcium
- No filtration is required with RDO Gold
- RDO Gold gives stellar morphological representation of bone biopsies
- There is no folding of tissues with RDO Gold
- RDO Gold is clear and non-precipitate

Both RDO and RDO Gold are:

- Far Superior to other Decalcifiers
- Great Cellular Differentiation
- Safe – Non Toxic – Non-Corrosive
- Dilutable
- Microwavable
- Superb Staining Quality
- Biodegradable
- Translucent
- Available in Wide Mouth Liter Bottle

References:

1/ Gayle Callis et al. "Dacalcification of Bone: Literature Review and Practical Study of Various Decalcifying Agents, Methods, and Their Effects on Bone Histology". The J. of Histology, Vol. 21, No. 1, March 1998.

2/ Sherley A. Powell, HT (ASCP) HTL. "Method to Facilitate Sectioning Incompletely Decalcified Bone". Mercer University, School of Medicine. Microtime Georgia, State Newsletter.

3/ Becky Scholes, HTL, MT (ASCP). "Bone Marrow Biopsies". H.I.S.T.O. Iowa State Newsletter.

Ordering

Cat. #	Description	Qty.
64143-01	RDO Decalcifier	1 L
64143-06	RDO Decalcifier	6 x 1 L/cs
64143-40	RDO Decalcifier	1 gal
64143-44	RDO Decalcifier	4 x 1 gal/cs
64144-01	RDO - Gold Decalcifier	1 L
64144-06	RDO - Gold Decalcifier	6 x 1 L/cs
64144-40	RDO - Gold Decalcifier	1 gal
64144-44	RDO - Gold Decalcifier	4 x 1 gal/cs

► Xylene Substitute – Hemo-De® *

An intensive study from 1992 throughout 2000 has shown that Hemo-De® (d-Limonene) a terpene-based chemical with a pleasant citrus fragrance, was able to replace many of the clinical laboratories toxic reagents, such as carbol-xylene, xylene, ethyl acetate and formalin.

In Parasitology – Hemo-De replaces ethyl acetate in the concentration procedure; Hemo-De replaces carbol-xylene, xylene and formalin in the trichrome procedure.

In Histology – Hemo-De replaces xylene in most all procedures. Hem-De is a superior solvent and Clearing agent that can be used in all tissue processing, deparaffinating and slide preparation.

Hemo-De Features:

- Soluble with alcohol and mounting media
- Biodegradable, non-corrosive, non-flammable (Combustible)
- Contains no benzene and no toluene
- Low toxicity levels
- Minimal tissue shrinkage
- Reasonably fast drying and leaves no residue

Hemo-De Application:

In Research and Medical – Hematology, Cytology, Pathology, Microbiology, Histology, Pathology, Hospital

In Mechanical Applications – Cleaning of machine parts, cleaning tools, engines etc.

In Electronic Applications – Circuits boards, electronic components, tools.

General Applications – Clean metal and glass surfaces. Dilute with water can be used to clean all plastic surfaces. Removal of adhesives, glues, tars...

Hem-De Information:

Chemical name:	d-Limonene (Terpene Hydrocarbon, n.o.s.)
Composition:	d-Limonene, CAS [5989-27-5]98.0% Butylated Hydroxyanisole (BHA), CAS [25013-16-5].....<0.024%
Flash Point (TCC):	121°F (49.4°C)
Boiling Point:	349°F (176°C) @ 760mmHg
Freezing Point:	-74°C
Shipping:	Terpene Hydrocarbons, n.o.s. ID No. 04858003, Flammable Liquid, Group III

References:

1/ W.E. Aldeen and D. Hale. "Use of Hem-De to eliminate toxic agents used for concentration and trichrome staining of intestinal parasites" J. of Clinical Microbiology, July 1992, 1893-1895, Vol. 30, No. 7

2/ Metzger, Zvi DMD et al. "Gutta-Percha Softening: 'Hem-De' as a Xylene Substitute" J. of Endodontics". 26(7):385-388, July 2000.

3/ Devon C. Hale, MD; et al. "Use of a Single Slide Trichrome- Stained Concentrate for the detection of intestinal Parasites Stained Concentration Procedure for Ova and Parasites" American Journal of Clinical Pathology, Vol. 106, NO. 2. Aug. 1996.

4/ J. M. Miller et al. "Biodegradable, effective substitute for xylene in the Ehrlich indole procedure". J. of Clinical Microbiology, Aug. 1994, 2028-2030, Vol 32, No 8.

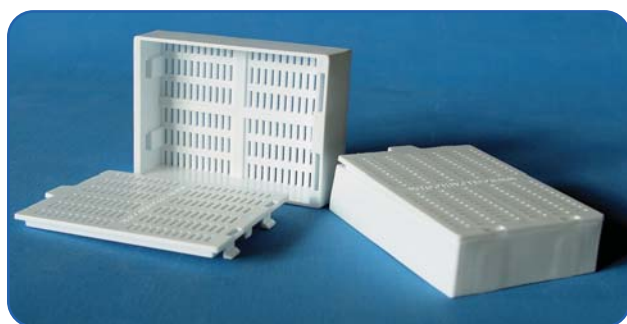
Ordering

Cat. #	Description	Qty.
23410-01	Xylene Substitute – Hemo-De	1 gal
23410-04	Xylene Substitute – Hemo-De	4 x 1 gal

Note: Hemo-De® is a product of Scientific Solvents.

► Supamega Tissue Processing Cassettes:

- Ideal for prostate, brain, breast tissue and eyes
- Extremely useful for research and toxicology laboratories
- Measures: - Inside: 64mm x 48mm x 13mm
- Outside: 75mm x 52mm x 18mm

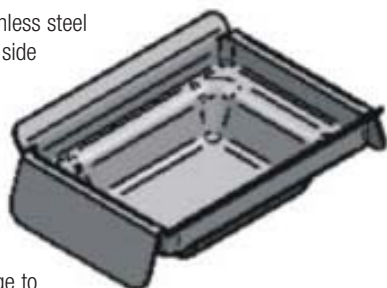


Ordering

Cat. #	Description	Qty.
70065-W	SupaMega Cassette – White	100/pk.
70065-G	SupaMega Cassette – Green	100/pk.
70065-B	SupaMega Cassette – Blue	100/pk.
70065-P	SupaMega Cassette – Pink	100/pk.
70065-Y	SupaMega Cassette – Yellow	100/pk.

► SupaMega Stainless Steel Base Molds

The SupaMega range of stainless steel base molds have extra deep side walls, allowing wax to be decanted into the cassettes during embedding without the risk of the usual leakage of wax. The smaller faced mold also saves wax on medium sized blocks too large to fit into standard cassettes, negating the use of full size molds.



Ordering

Cat. #	Description	Qty.
62354-36	SupaMega SS Base Mold, 36x36x10mm	5/pk.
62354-60	SupaMega SS Base Mold, 60x45x15mm	5/pk.

► Strip Disposable Base

Disposable base molds are manufactured from high impact polystyrene, offering a low cost alternative to stainless steel. These molds are available in a choice of sizes and depths. The molds have a smooth interior finish and rounded corners for ease of removal. There are five molds per strip and they are packed 100 strips to a case.

- Wide range of sizes to suit your needs
- Disposable – no cleaning required
- International standard sizes
- Convenient with 5 mold per strip



Cat. #	Description	Size	Qty.
62351-07	Strip Disposable Mold	7 x 7 x 5 mm	100/pk.
62351-15	Strip Disposable Mold	15 x 15 x 5 mm	100/pk.
62351-24	Strip Disposable Mold	24 x 24 x 5 mm	100/pk.
62351-30	Strip Disposable Mold	30 x 24 x 5 mm	100/pk.
62351-37	Strip Disposable Mold	37 x 24 x 7 mm	100/pk.
62351-33	Strip Disposable Mold	33 x 25 x 13 mm	100/pk.
62351-39	Strip Disposable Mold	39 x 25 x 13 mm	100/pk.

► Paper Biopsy Bags

Due to the amazing demand from our customers, EMS is re-introducing the original Paper Biopsy Bags. These bags are made from porous paper which provides maximum tissue safety during processing. The bags permit proper fluid exchange and drainage.

To Use: Simply introduce the specimen into the bag and fold its end, enclosing the cassette or capsule – you are now ready to process as usual.

Bag measurement: Overall 1¼" W x 3" L (45 x 75 mm),
Inside Seam: 1⅜" W (35 mm)



Cat. #	Description	Qty.
62326-01	Paper Biopsy Bags	100
62326-05	Paper Biopsy Bags	500

Lynx II

➤ Automated Tissue Processor for Histology and Microscopy

EMS is proud to announce the release of the most unique state-of-the-art tissue processor which not only is compatible with all plastic resins but paraffin waxes as well.

➤ Introduction:

LYNX II is designed to be the successor of the Lynx Tissue Processor with several enhancements including capabilities to perform optional processing of larger size samples for Histology.

The LYNX II holds 24 reagent vials for EM processing. Optional HP (Histology processing) may be done with 12 larger size reagent vials for HP processing. In both EM and HP modes, LYNX II has two independently controlled heating/cooling stations.

Operational Overview of LYNX II:

LYNX II is a batch mode, tissue processing system. The tissues may be processed for EM or HP. Tissues of either type are processed in the same manner: Samples are mounted on the sample arm and reagents are loaded on the reagent carousel. Based on the program selected by the user, the LYNX II rotates the reagent carousel until the selected reagent station is at the processing station. At the processing station the sample is lowered into the reagent. Based on the selection of agitation and vacuum, the LYNX II periodically moves the sample arm to provide agitation and applies vacuum when the agitation is not in progress. Once the programmed time in a given reagent is over, the sample is raised and the next reagent is rotated in the processing station.

The operator may select the processing for EM or HP by the program numbers. Programs 1 through 10 are used for EM processing and programs 11-20 are used for HP processing. In addition to the proper program number selection, it is the responsibility of the end user to use the proper carousel positions and the appropriate type of reagent vials based on the selection of EM vs. HP processing. Once the unit is properly configured for EM or HP processing, the operator loads the reagent carousel and the samples, selects the desired program and starts the run.

At the end of the run, the sample is retained in the last reagent until the operator removes the sample.



➤ Features:

Number of reagent vials for HP processing	12
Number of reagent vials for EM processing	24
Volume of reagent in EM reagent vial	25 ml
Volume of reagent in HP reagent vial	125 ml
Number of Programs	20 (10 for EM and 10 for Histology)
Two independently controlled heating/cooling stations	
Easy replacement of reagent carousel	
Paraffin Processing	
Sample agitation	
Vacuum infiltration during processing	
Choice of plastic and metal containers for improved chemical compatibility and heat transfer	
Optional external media based interface to a PC for ease of programming and allowing for the editing of programs on a PC and the transfer of programs between the LYNX II and the PC	
Built-in fume extraction and ability to connect the discharge hose to lab exhaust system	
Internal battery back-up during power fail to protect samples	
Ability to continue run after power interruption	
User Friendly Operator Interface	
Optional external UPS for continued processing during longer power outages	

► Functional Specifications:

System Configuration:

1. LYNX II is designed with the following functional modules.

- Rotary mechanism to rotate the reagents
- EM and HP reagent carousel
- Up/Down mechanism to move the sample in and out of the reagent as well as to provide the agitation
- EM and HP Sample arms
- Tight seal for all reagent containers except for the one at the processing station.
- Vacuum pump and a pressure sensor or a switch
- Two Peltier operated heating/cooling stations with independent temperature sensors and controls
- Fume extraction fan and air flow sensor

2. Reagent Carousel:

A reagent carousel may be installed, either a 24-position carousel for holding EM reagents or a 12-position carousel for holding HP reagents. The EM carousel holds cylindrical vials that are approx. 1.2" in diameter and 2.5" tall, whereas HP vials are approx. 2.2" diameter (to hold 1.75" x 1.2" cassette flat) and 2.5" tall.

The carousel is approx. 12" in diameter. Each vial has a flange for ease of handling. The vials are available in either plastic or aluminum. The vials may be mixed and matched between the metal and the plastic vials on a given carousel for certain kinds of processing.

The LYNX II has a built in sensor to detect that the proper reagent vial types (EM vs. HP) are installed on the unit before starting a run. Ability to detect only one of the two vial types is sufficient.



3. Sample Arm:

The sample arm holds either an EM sample holder assembly or an HP sample holder assembly. Each sample holder assembly is designed to mount on the arm at a location to center the samples in its respective reagent container. The Sample Arm top may be changed to accommodate different samples.

4. Agitation and Vacuum:

The arm provides a gentle agitation (approx. 5 mm up and down travel at a rate of 2.5 mm per second or one up/down agitation per second) once the sample is in the reagent container. Five agitation strokes are executed in 5 seconds and repeated every 45 seconds. If vacuum infiltration is selected, the agitation will be applied for 5 seconds followed by 40 seconds of vacuum. These agitation-only or the agitation-vacuum cycles will be repeated for the duration of the station time.

The sample holder assembly has a fitting to attach the vacuum hose from the vacuum pump.

5. Heating-Cooling Stations:

The LYNX II provides 2 independent, identical heating-cooling stations (HCS). Each HCS is heated or cooled by a Peltier module and has its own temperature sensor. One HCS is located at the sample processing station and the second one is located one position prior to the sample processing station. This arrangement allows for the pre-heating or pre-cooling of the reagent for a program where the reagents are arranged in a sequential, contiguous manner.

Each HCS can be programmed to be between 4 deg. C and 65 deg. C. The accuracy of the actual temperature will be +/- 2 deg. C measured on the surface of the Heating – Cooling station. The set point at the HCS surface is reached within 7 minutes of the arrival of the reagent at the station.

6. Fume Control:

LYNX II provides a fume extraction fan to direct fumes from the reagent/sample area to an exhaust port. An external hose may be connected to the unit and the hose may be directed to a fume hood or to a laboratory exhaust system. The fume extraction is designed to ensure that the fumes are diverted away from electronics and the mechanism components.

7. Lid/Cover:

An acrylic cover with a latch is part of the fume control system. The controller of the system can detect if the cover is latched or not. By default, a run cannot be started (and will pause) if the cover is not in place. However, there is a software override will allow for the running of the unit without closing the cover.



Histology & Microscopy Equipment

Lynx II Automated Tissue Processor for Histology and Microscopy *(continued)*

8. Seal for Reagent Vials:

A tight seal is provided to cover all reagent vials except for the one under the processing station.



Reagents Used:

Materials for various components and subsystems of LYNX II are compatible with the following reagents during processing.

HP PROCESSING

- Formalin
- Alcohol
- Xylene
- Xylene Substitutes
- Water
- Paraffin
- 10% Bleach Solution
(to wipe clean the system)

EM PROCESSING

- Buffers
- Osmium Tetroxide
- Ethyl Alcohol
- Acetone
- Propylene Oxide
- Epoxy/Acrylic Resins

9. Operation During Power Outage:

The LYNX II contains a small internal battery capable of moving the sample from up position to down position and the carousel to the next reagent position at least three times without being re-charged, to preserve the sample during a power outage.

When the electronics in LYNX II detects that the A/C power is about to fail, the LYNX II will shut down the power to the Peltier elements at both heating/cooling stations. Next, it will ensure that the samples are down in a reagent container. If the samples are out of a reagent vial (since LYNX II was just about to rotate the carousel to the next reagent position or was in the middle of the rotation), the carousel will be rotated by one position and then the samples will be lowered in to the reagent at the processing station. The time when the power fail warning was activated will be recorded and the unit will go in the standby mode.

Once the power is restored and is maintained for at least 30 seconds, LYNX II will resume the run. As LYNX II resumes run, the station time countdown does not resume until the heating/cooling stations have reached the desired temperatures. The station time countdown does not begin for additional 60 minutes if the temperature at the processing station or at the previous station was above 55° C during an HP run. This feature ensures that the paraffin at either of the two stations completely melts before moving samples to the next station.

► Specifications

Dimensions:

Max Width:	22.5"
Max Depth:	19.0"
Max Height:	12.0" (cover closed)
Max Weight:	50lb (32 kg)

Electrical Design:

Display:	8 lines x 20 column text only LCD
Keypad:	Membrane style keypad with tactile feed back
Mechanism Drive:	Stepper Motors

Power Requirements:

100 - 115 volts AC, 50-60 Hz, 8 Amps Max.	
230 volts AC, 50-60 Hz, 4 Amps Max.	
Back-up power:	NiCd Battery, 12 volts, 1 Amp-hour

Fuse Rating:

100 - 115 volt version	8 Amps x 250 Volts AC, Time Delayed (Slo-Blo)
230 volt version	5 Amps x 250 Volts AC, Time Delayed (Slo-Blo)

Operating Environmental Conditions:

Ambient Temperature:	15 to 25° C (70 to 90° F)
Relative Humidity:	20-80% non-condensing
Ambient Pressure:	28"-32" (70-80 mm) of Hg

Storage/Transportation Conditions:

Temperature:	10-40° C (50 to 102° F)
Humidity:	15%-80% non-condensing
Pressure:	28"-32" (70-80 mm) of Hg

Electron Microscopy Sciences is committed to offering you the most up to date equipment on the market. If you have any ideas or would like to see us make any changes in our line please let us know. All ideas and suggestions are encouraged. We look forward to hearing from you.



Histology & Microscopy Equipment

► Ordering Information

Lynx II Accessories and Consumables

Cat. #	Description
L12600	Lynx II for Microscopy*
L12601	Lynx II for Histology**
L12610	Histology Kit (Histo Sample Holder, Histo Sample Arm, Histo Carousel, Power Cord, Operator Manual, Histo Aluminum Containers (24), Histo Plastic Containers (36), Plastic Caps (36), Exhaust Hose, Small Cassettes (100), 2 Sample Record Note Pads, Spare Fuses.
L12612	Electron Microscopy Kit (EM Sample Holder, EM Sample Arm, EM Carousel, Loading Jig, Power Cord, Operator Manual, Aluminum Containers (24), Plastic Containers (72), Plastic Caps (72), Exhaust Hose, Small Baskets (100), Large Baskets (100), Basket Lids (100), 2 Sample Record Note Pads, Spare Fuses
L12602	Lynx II for EM and HP Combined***
L12655	EM Reagent Vials, Bag of 72
L12656	EM Regent Vial Cap, Bag of 72
L12657	HP Reagent Vials, Bag of 36
L12658	HP Reagent Vial Cap, Bag of 36
L12659	EM Aluminum Container (Box of 24)
L12660	HP Aluminum Container (Box of 12)
L13154	EM Sample Holder Assembly (Basket Stem Assembly)
L12663	HP Cassette Holder Assembly
L12661	Vacuum Pump Tubing (1 each)
L12662	Vial Seal Assembly
L12995	EM Sample Arm Seal
L12996	HP Sample Arm Seal
L12952	EM Carousel (Without Aluminum Containers)
L12953	HP Carousel (Without Aluminum Containers)
L12664	Replacement Back-up Battery
L12665	Lynx II Operator Manual
L12667	Lynx II Service Manual
300.0005	Disposable Basket Lid
300.0002	Disposable Basket Small
300.0041	Specimen Record Pad 3 and 4 Divisions
300.9513	Specimen Record Pad 8 Divisions
300.9123	Extra Large Basket
300.8041	Exhaust Hose 3 Meter
300.0011	EM Sample Loading Jig (Same as Lynx I)
300.0196	Disposable Basket 8 Segment
300.0003	Disposable Basket Large

*The Lynx II for Microscopy comes with: EM Sample Holder, EM Sample Arm, EM Carousel, Loading Jig, Power Cord, Operator Manual, Aluminum Containers (24), Plastic Containers (72), Plastic Caps (72), Exhaust Hose, Small Baskets (100), Large Baskets (100), Basket Lids (100), 2 Sample Record Note Pads, Spare Fuses.

** The Lynx II for Histology comes with: Histo Sample Holder, Histo Sample Arm, Histo Carousel, Power Cord, Operator Manual, Histo Aluminum Containers (24), Histo Plastic Containers (36), Plastic Caps (36), Exhaust Hose, Small Cassettes (100), 2 Sample Record Note Pads, Spare Fuses.

***The Lynx II for Microscopy and Histology comes with everything found in both units .

All of the above accessories may be purchased separately or in the kit.

Electron Microscopy Sciences Announces their State of the Art Scientific Equipment Repair Center



*No equipment is too small or impossible to either
Repair, Refurbish, or Upgrade!*

Our facility is equipped to handle the following Manufacturers:

- Balzers/Baltech
- Denton
- Edwards
- Emitech
- Emscope
- Bio-Rad
- Leica
- Reichert-Jung
- LKB
- RMC-Boeckeler
- And Many More...

Our unique service allows us to come to you, or you send the equipment to us, depending on the level of Repair/Refurbishment needed.

Equipment such as:

- Vacuum Systems
- Microtomes
- Ultramicrotomes
- Tissue Slicers
- Vibratomes
- Ovens
- Baths
- Shakers
- Tissue Processors
- Lynx
- Freeze Fracture Instruments
- High Pressure Freezers/Slammers/Propane Jet Freezers
- And Much More...

For more information on any of our services, or a comprehensive quote, please call, write, or e-mail us today.

Benchtop Cooling & Storage

► The CoolSafe™

The World's Most Versatile and Effective Benchtop Cooling and Storage System

VERSATILE – Designed for 0.2ml tubes (strips or trays), 96-well and 384-well microplates, 0.5ml, 1.5ml, 5ml tubes

Specially Formulated – Cool Bricks maintain a constant temperature (1°C or -10°C) for up to 10 hours

QUALITY ENGINEERING – Each aluminum Cool Chamber surrounds tubes to guarantee sustained cold temperatures

DURABLE – The CoolSafe box is made of triple density expanded polystyrene and molded under extreme pressure creating a durable container that guarantees temperature stability.

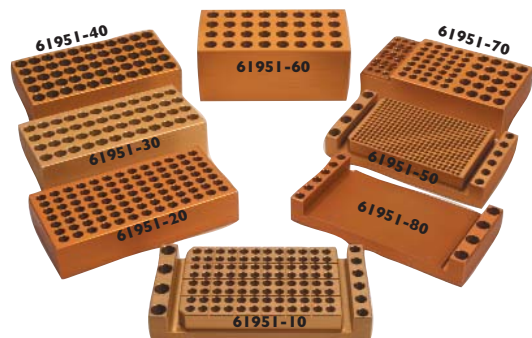
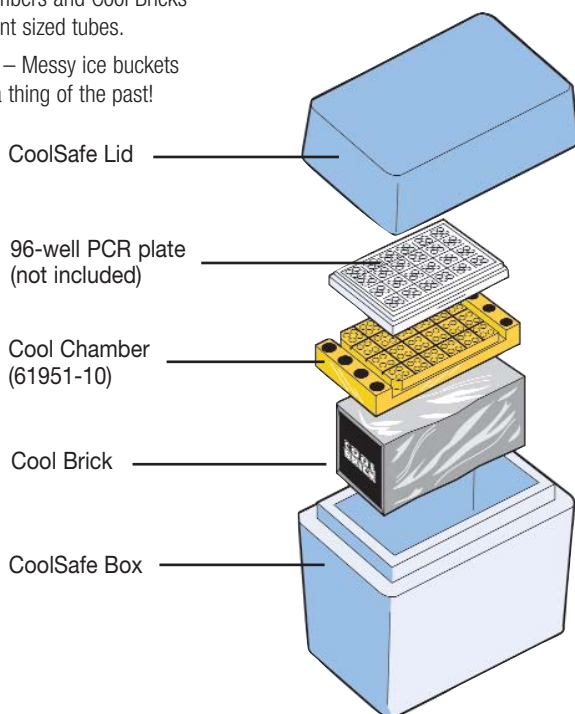
EASY TO USE – Easily interchange Cool Chambers and Cool Bricks for different sized tubes.

No Mess – Messy ice buckets are now a thing of the past!



“Surround-a-Tube” Engineering

Super temperature-conducting solid metal surrounds the vast majority of the surface area of the microtube, keeping the entire sample or tray of samples cool.



† Patented

Complete CoolSafe Systems

Cat. #	Description	Holes	Qty.
61950-10	For 0.2ml PCR plates or tubes	96**	Kit *
61950-20	For 0.5ml tubes	91	Kit *
61950-30	For 1.5ml tubes	48	Kit *
61950-40	For 1.5ml Cryogenic tubes	55	Kit *
61950-50	For 384-well plates	384**	Kit *
61950-60	For 5ml tubes	32	Kit *
61950-70	For 0.2ml, 0.5ml, 1.5ml tubes	79	Kit *
61950-80	For flat-bottom microplates	None**	Kit *

Individual CoolSafe Components

Chambers to keep samples cold. Great with hot plates

Cat. #	Dimensions	Ideal Use	Qty.
61951-10	6 1/8" L x 3 1/8" W x 1" H	0.2ml tubes	Each
61951-20	6 1/8" L x 3 1/8" W x 1 1/4" H	0.5ml tubes	Each
61951-30	6 1/8" L x 3 1/8" W x 1 1/2" H	1.5ml tubes	Each
61951-40	6 1/8" L x 3 1/8" W x 1 1/2" H	1.5ml Cryogenic tubes	Each
61951-50	6 1/8" L x 3 1/8" W x 1" H	384-well plates	Each
61951-60	6 1/8" L x 3 1/8" W x 2 1/2" H	5ml tubes	Each
61951-70	6 1/8" L x 3 1/8" W x 1 1/2" H	0.2ml, 0.5ml, 1.5ml tubes	Each
61951-80	6 1/8" L x 3 1/8" W x 1" H	For flat-bottom microplates	Each

Cool Bricks & Accessories

Cat. #	Temp.	Description	Qty.
61952-20	-10°C	For 0.2ml, 0.5ml, 1.5ml & 5ml tubes	Each
61952-30	1°C	For 0.2ml, 0.5ml & 1.5ml tubes	Each
61952-10	1°C	For 5ml tubes	Each
61953-01		CoolSafe Box	Each
61953-50		CoolBag	Each

*Each Complete CoolSafe System includes:

1 CoolSafe box with lid, 1 Cool Chamber and 2 Cool Bricks (1°C & -10°C)

**These Chambers also include 4 holes for 1.5ml tubes and 6 holes for 0.5ml tubes

► The CoolSafe™ Deluxe

- Additional sample protection
- Improved portability
- Smaller bench-top footprint
- Clear lid for sample visibility



Cat. #	Description	Holes	Qty.
61954-10	For 0.2ml PCR plates or tubes	96**	Kit *
61954-20	For 0.5ml tubes	91	Kit *
61954-30	For 384-well plates	384**	Kit *
61954-40	For flat-bottom microplates	None**	Kit *
61954-55	CoolSafe Deluxe box		Each

*Each complete CoolSafe Deluxe system includes:

1 CoolSafe Deluxe box, 1 Cool Chamber and 2 Cool Bricks (1°C & -10°C)

**These Chambers also include 4 holes for 1.5ml tubes and 6 holes for 0.5ml tubes

Benchtop Cooling & Storage

► Specialty Chambers

Ideal for Ice Pans, Ice Buckets, and Cold or Hot Plates

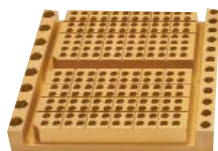
MULTIPLE USES – Ideal for use on hot or cold plates or for temperature sensitive liquid transfers

DURABLE – Anodized aluminum blocks will not rust or corrode

IDEALLY SIZED – A variety of options are available to accommodate PCR tubes and trays, 1.5ml tubes, 15ml and 50ml conical tubes



61955-80



61955-10

61955-41



61955-21

61955-40

61955-20

A variety of Specialty Chambers are available to keep samples cool and on ice while you work. Freeze these Chambers overnight for added cooling convenience.

Cat. #	Dimensions	Ideal Use	Holes	Qty.
61955-10	6 1/8" L x 6 3/4" W x 1" H	0.2ml tubes PCR Plates	192	Each
61955-20	3 1/2" L x 1 3/4" W x 3 1/2" H	15ml tubes	6	Each
61955-21	3 1/2" L x 3 1/2" W x 3 1/2" H	15ml tubes	12	Each
61955-30*	8 1/4" L x 3" W x 2 1/2" H	1.5ml tubes	64	Each
61955-40	3 1/2" L x 1 3/4" W x 3 1/2" H	50ml tubes	2	Each
61955-41	3 1/2" L x 3 1/2" W x 3 1/2" H	50ml tubes	4	Each
61955-80	8 1/4" L x 2 5/8" W x 1 1/4" H	1.5ml tubes	80	Each

These Chambers do not fit the CoolSafe system; use separately (*61955-30 not pictured)

► Frigmat® CUB – Dry Ice Maker

Economical Block Dry Ice Maker for On-Demand Use

In only a few minutes, this compact device can be attached to a liquid CO₂ cylinder and will produce a ready-to-use 250 – 300 gram block of dry ice. (Each 50 lb. cylinder makes from 10 to 16 blocks of dry ice). Set-up and use is safe and simple. Dry ice production can be viewed through the transparent polycarbonate body that secures without clamps or screws or tools ensuring easy removal of the solid block of dry ice and connection from the CO₂ cylinder. A rugged nickel plated "pigtail" connects the Frigmat® Cub – Dry Ice Maker to the CO₂ cylinder valve. The system operates at very low pressure (displayed on the built-in dial gauge) and incorporates multiple pressure relief safeguards.

Cylinder Connection: 1.8m (6 ft) nickel-plated copper connecting tube with standard CGA 320 thread coupling for easy attachment to a CO₂ cylinder.



Cat. #	Description	Qty.
62057-10	Frigimat® Cub – Dry Ice Maker	Each

► FreezGuard™ Alarm

Alarm will Sound for Up to Three Days

Prevent costly, time consuming sample loss with this practical battery operated system. The FreeGuard™ Alarm monitors freezers and coolers and detects any variance from temperatures between -20°C and 13°C (-5°F to 55°F), ±1°C, which are preset by the user. The resonant alarm will continue to sound for up to three days if the temperature falls out of the pre-set range. Should the temperature correct itself, an LED will indicate that a variance has occurred. The alarm can be reset manually. A beep will signal when the 9V battery (not included) is low. For added protection, and extra life, a second battery can be connected. The unit mounts with self-adhesive tape or screw. Unit comes with a 3 meter probe lead, and measures 86W x 35D x 26mmH (3 3/16 x 1 1/2 x 5 1/16). The weight without the battery is 144 g (5.1 oz).



Ordering

Cat. #	Description	Qty.
72092-10	FreezGuard, Celsius	Each
72092-20	FreezGuard, Fahrenheit	Each

► Frigmat® – Dry Ice Maker

US. Patent Des. 220,454

Produce the Dry Ice You Need Right in the Lab

The Frigmat® Dry Ice Maker eliminates the need to buy large quantities of dry ice when only a few blocks are needed. It employs the Joule-Thomson



effect to produce a solid 454 gm (16 oz.) block of dry ice in one to two minutes. A brass relief valve safely vents excess gas. Removing the dry ice block requires just 30 seconds. Each 50 lb. cylinder of liquid CO₂ will make 8 to 9 blocks of dry ice, each measuring 8.5cm (3 3/8") x 11cm (4 3/8"). The unit is made from epoxy-coated steel with an aluminum ice chamber and brass valves with four non-skid rubber feet. Dimensions are 30 x 17 x 13 cm H (12 x 6 1/2 x 5"). Shipping weight: 5.5kg (12 lbs) and includes a 1.8m (6 ft) nickel-plated copper connecting tube with standard GCA 320 (0.830" – 14) thread couplings for easy attachment to an LCO₂ cylinder.

Ordering

Cat. #	Description	Qty.
62056-10	Frigimat® Dry Ice Maker (US Model)	Each
62056-20	Frigimat® Dry Ice Maker (Europe Model)	Each
62056-22	Frigimat® Dry Ice Maker (Japan Model)	Each

Labels, Printers, Tapes, & Dispensers

► Wet Grip

Labels for Moist, Frosty or Frozen Tubes

- “GRIPS” to wet, frost-covered and frozen surfaces
- Temperature resistant to -40°C
- Compatible with centrifuge rotors
- Resistant to chemicals and solvents
- Adheres to plastics, glass, metals and even paperboard boxes
- Print on sheets with Laser printers or use rolls for Direct Thermal printers

Direct Thermal (Temp. Range: -40°C TO 70°C)

Ordering

Cat. #	Label SIZE (Inches/Millimeters)	Ideal Use	Qty.
77594-10	1.05" x 0.50" / 27mm x 13mm	0.5ml tubes	Each
77594-20	1.50" x 0.50" / 38mm x 13mm	1.5ml tubes	Each
77594-30	1.50v x 0.75" / 38mm x 19mm	2.0ml tubes	Each
77594-40	3/8v diameter / 9.5mm diameter	0.5ml tubes	Each
77594-50	2.00" x 0.25" / 51mm x 6mm	Microplates	Each
77594-60	1.50v x 0.50" - 3/8" diameter spot	1.5ml tubes	Each

Cat. #	Description	Qty.
77593-50	Dymo® LabelWriter® 400	Each



ALL LABELS ARE CLEAR, ON 1" I.D. CORES WITH 1,000 LABELS/ROLL.
Dymo and LabelWriter are registered trademarks of the Dymo Corp., an Esselte Office Products Co.

Laser Sheets (Temp. Range: -40°C TO 100°C)

Ordering

Cat. #	Color	Tag Size (Inches / Millimeters)	Sheet layout	Labels/Sheet	Ideal Use	Qty.
77595-10	White	1.28" x 0.50" / 33mm x 13mm	5 Across - 17 Down	85	1.5ml tubes	1,700/pk.
77595-20	White	0.94" x 0.50" / 24mm x 13mm	7 Across - 17 Down	119	0.5ml tubes	2,380/pk.
77595-30	White	1.50" x 0.75" / 38mm x 19mm	5 Across - 12 Down	60	1.5ml - 2.0ml tubes	1,500/pk.
77595-40	White	0.875" x 0.875" / 22mm x 22mm	8 Across - 12 Down	96	Microscope Slides	2,400/pk.

► Chameleon Tough-Tags

Autoclave Indicating – Labels change color* from Green to Purple when exposed to autoclave temperatures.

Tough – Chemically inert, polyester labels resist most organic solvents and caustic agents. They adhere to most plastics, glass and metals without cracking, peeling or degrading.

Temperature-Resistant – From 40°C to 121°C, Chameleon Tough-Tags resist boiling water baths, autoclaving and moderate freezer temperatures.

Ideally Sized – Fits a variety of microcentrifuge tubes, microscope slides and other laboratory containers. Tubes labeled with Chameleon Tough-Tags will easily slide in and out of centrifuge rotors.

Compatible – Labels accept writing from any lab marker.



Before Autoclaving

After Autoclaving

Ordering

Cat. #	Color	Label Size	Qty.
77541-GP	Green>Purple	0.94" x 0.50" / 24mm x 13mm	1,000/roll
77542-GP	Green>Purple	1.28" x 0.50" / 33mm x 13mm	1,000/roll

*Labels will have a slight "textured" look to them due to the nature of the ink.

Labels, Printers, Tapes, & Dispensers

► Tough Spots® On a Roll

Pre-cut Peel-off Round Labels for Microcentrifuge Tube Tops

Easy To Write On – PVC labels accept writing from most lab markers including our Solvent Resistant Pens and Teeny Writers.

Convenient – Dispensing box assists in labeling individual tubes used in small experiments.

Options – A variety of sizes, colors and formats ensures the right label for the job.



Tough-Tag Station

Conveniently holds up to 6 rolls of Tough-Tags, Tough-Spots or Cryo-Tags. Utilize the ledge to easily write on labels for sample identification.

*77582-100 does not fit the Tough-Tag Station

Ordering

Cat. #	Description	Qty.
77590-10	Tough-Tag Station	Each

Cat. #	Color	Spot Diameter (Inches / MM)	Ideal Use	Qty.
77580-x	Specify	3/8" / 9.5mm	0.5ml Tubes	1,000/roll
77581-x	Specify	1/2" / 13mm	1.5ml Tubes	1,000/roll
77582-18	White	3/16" / 4.8mm	0.2ml Tubes	1,500/roll
77580-44	White	7/16" / 11mm	1.5ml Tubes	1,000/roll
77582-75	White	3/4" / 19mm	15-50ml Tubes	500/roll
77582-100*	White	1.00" / 25mm	50ml Tubes	500/roll
77586-10	White 5 - Across	3/8" / 9.5mm	0.5ml Tubes	5,000/roll
77586-11	Assorted 5 - Across	3/8" / 9.5mm	0.5ml Tubes	5,000/roll
77586-20	White 5 - Across	1/2" / 13mm	1.5ml Tubes	5,000/roll
77586-21	Assorted 5 - Across	1/2" / 13mm	1.5ml Tubes	5,000/roll

To Specify color, substitute (x) with: W=White, B=Blue, Co=Coffee, Go=Gold, G=Green, La=Lavender, Ma=Maroon, O=Orange, P=Pink, R=Red, Si=Silver, Y=Yellow [Ex: 77580-G for Green/77580-W for White]

Tough-Spots on a roll Sizing Guide

1. $\frac{3}{8}$ " diameter
for 0.5ml tubes



2. $\frac{1}{2}$ " diameter
for 1.5ml - 2.0ml tubes



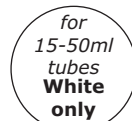
3. $\frac{3}{16}$ " diameter
for 0.2ml tubes
White only



4. $\frac{7}{16}$ " diameter
for 1.5 - 2.0ml tubes
White only



5. $\frac{3}{4}$ " diameter



- 6.

1.00"
diameter
for 50ml tubes
White only

Labels, Printers, Tapes, & Dispensers

► Lazer Tough-Spots®

Pre-Cut Peel-Off Labels for Microcentrifuge Tube Tops

Temperature-Resistant – Withstands freezer temperatures down to -196°C (liquid and vapor phase nitrogen), boiling water baths (100°C), autoclaving and moderate oven temperatures (150°C).

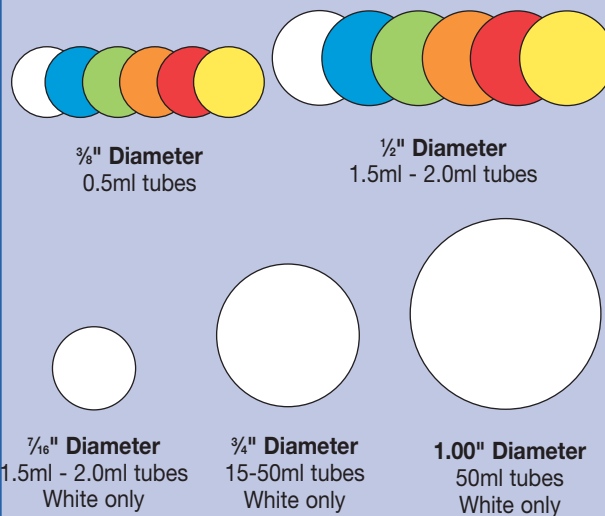
Tough – Chemically inert labels resist most organic solvents and caustic agents. They adhere to plastics*, glass and metals without cracking, peeling or degrading.

Specially Designed – Label sheets are specially top-coated to readily accept laser printing. Heat-resistant, stay-flat sheets will not jam laser printers.

Innovative – Made with a flexible, polyolefin† label material and acrylic adhesive. This unique combination expands and contracts together with temperature fluctuations, resulting in a strong adhesive bond.



Lazer Tough-Spots - Sizing Guide



*Rainbow Packs contain 4 sheets each of Blue, Green, Orange, Red and Yellow

Cat. #	Color	Spot Diameter	Sheet Layout	Labels/Sheet	Qty.
77585-x	Specify	3/8" - 9.5mm	12 Across - 16 Down	192	3,840/pk.
77585-05	Rainbow*	3/8" - 9.5mm	12 Across - 16 Down	192	3,840/pk.
77587-x	Specify	1/2" - 13mm	12 Across - 16 Down	192	3,840/pk.
77587-05	Rainbow*	1/2" - 13mm	12 Across - 16 Down	192	3,840/pk.
77585-44	White	7/16" - 11mm	13 Across - 18 Down	234	4,680/pk.
77588-75	White	3/4" - 19mm	9 Across - 12 Down	108	2,160/pk.
77588-100	White	1.00" - 25mm	7 Across - 9 Down	63	1,260/pk.

To Specify color, substitute (x) with a number: W=White, B=Blue, G=Green, O=Orange, R=Red, Y=Yellow [Ordering Example: 77585-R for Red / 77585-W for White]

*100% Virgin Polypropylene tubes are recommended for optimal performance. Avoid the use of siliconized surfaces.

► Lazer Cryo-Babies® & Cryo-Tags®

Labels for Cryogenic Storage†

Temperature-Resistant – From -196°C to 150°C. Cryo-Babies and Cryo-Tags withstand freezer temperatures down to -196°C (liquid and vapor phase nitrogen), boiling water baths (100°C), autoclaving and moderate oven temperatures (150°C).

Tough – Chemically inert labels resist most organic solvents and caustic agents. They adhere to most plastics*, glass and metals without cracking, peeling or degrading.

Specially Designed – Label sheets are specially top-coated to readily accept laser printing. Heat-resistant, stay-flat sheets will not jam in laser printers.

Innovative – Made with a flexible, polyolefin† label material and acrylic adhesive. This unique combination expands and contracts together with temperature fluctuations resulting in a strong adhesive bond.

Note: Please see Page 27 for sizing guide

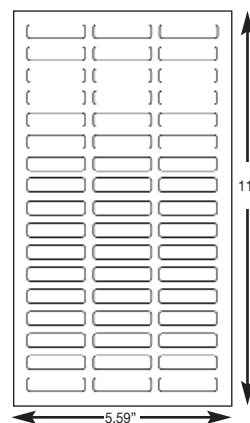
† Patented

MINI SHEETS

51 Labels Per Sheet
(3 Across - 17 Down)

Now available in our most popular label size, 1.28" x 0.50", combine the reliability of Cryo-Tags and the convenience of printing less at a time. This is a perfect solution for small experiments and clinical trials.

See ordering details on the next page (77559-W).



Packs are available in Individual Colors or in *Rainbow Packs



(4 sheets of each color)

Labels, Printers, Tapes, & Dispensers

Sizing Guide for Laser Cryo-Babies & Cryo-Tags

1. 1.28" x 0.50"
for 1.5-2.0ml tubes
(white and colors)

2. 0.94" x 0.50"
for 0.5ml tubes
(white and colors)

3. 1.50" x 0.75"
General Purpose
(white and colors)

4. 1.69" x 0.75"
CryoVials
(white and colors)

5. 1.50" x 0.25" (Microplates)

6. 2.625" x 1.00"
For boxes, tube racks
& other containers
(white and colors)

7. 3.00" x 2.00"
For bottles, tube racks, boxes
and other laboratory containers
(white only)

8. 1.28" x 0.50"
for 1.5-2.0ml tubes
(white only) 3/8"
77574-W

9. 2.50" x 0.50"
For 0.5ml - 2.0ml tubes
(white only)

10. 1.00" x 1.00"
For Microscope
Slides
(white only)

11. 1.125" x 1.75"
For racks and
boxes
(white only)

Cat. #.	Color	Tag Size (Inched/ Millimeters)	Sheet Layout	Labels/Sheet	Ideal Use	Qty.
1. 77560-x	Specify	1.28" x 0.50" / 33mm x 13mm	5 Across - 17 Down	85	1.5ml tubes	1,700/pk.
77560-05	Rainbow*	1.28" x 0.50" / 33mm x 13mm	5 Across - 17 Down	85	1.5ml tubes	1,700/pk.
77559-W NEW	White	1.28" x 0.50" / 33mm x 13mm	3 Across - 17 Down	51	1.5ml tubes	1,020/pk.
2. 77561-x	Specify	0.94" x 0.50" / 24mm x 13mm	7 Across - 17 Down	119	0.5ml tubes	2,380/pk.
77561-05	Rainbow*	0.94" x 0.50" / 24mm x 13mm	7 Across - 17 Down	119	0.5ml tubes	2,380/pk.
3. 77564-x	Specify	1.50" x 0.75" / 38mm x 19mm	5 Across - 12 Down	60	General Purpose	1,200/pk.
77564-05	Rainbow*	1.50" x 0.75" / 38mm x 19mm	5 Across - 12 Down	60	General Purpose	1,200/pk.
4. 77565-x	Specify	1.69" x 0.75" / 43mm x 19mm	4 Across - 13 Down	52	CryoVials	1,040/pk.
77565-05	Rainbow*	1.69" x 0.75" / 43mm x 19mm	4 Across - 13 Down	52	CryoVials	1,040/pk.
5. 77567-x	Specify	1.50" x 0.25" / 38mm x 6mm	4 Across - 39 Down	156	Microplates	3,120/pk.
77567-05	Rainbow*	1.50" x 0.25" / 38mm x 6mm	4 Across - 39 Down	156	Microplates	3,120/pk.
6. 77566-x	Specify	2.625" x 1.00" / 67mm x 25mm	3 Across - 10 Down	30	Racks & Boxes	600/pk.
77566-05	Rainbow*	2.625" x 1.00" / 67mm x 25mm	3 Across - 10 Down	30	Racks & Boxes	600/pk.
7. 77568-W	White	3.00" x 2.00" / 76mm x 51mm	3 Across - 4 Down	12	Racks & Boxes	240/pk.
8. 77574-W	White	1.28" x 0.50" - 3/8" diameter spot	4 Sets Across - 17 Sets Down	68 sets	1.5ml tubes	1,360 sets/pk.
9. 77572-W	White	2.50" x 0.50" / 64mm x 13mm	3 Across - 20 Down	60	0.5 - 2.0ml tubes	1,200/pk.
10. 77571-W	White	1.00" x 1.00" / 25mm x 25mm	8 Across - 10 Down	80	Microscope slides	1,600/pk.
11. 77569-W	White	1.125" x 1.75" / 28mm x 44mm	7 Across - 6 Down	42	Racks & Boxes	840/pk.
12. 77570-W	White	8.50" x 11.00" / 216mm x 279mm	Blank Sheet	Blank	Cut to size	20/pk.

* 100% Virgin Polypropylene tubes are recommended. Avoid the use of siliconized surfaces.

To Specify color, substitute (x) with a letter: B=Blue, G=Green, O=Orange, R=Red, W=White, Y=Yellow [Ordering Example: 77560-R for Red or 77560-W for White]

† Patented

Cryo-Babies and Cryo-Tags on a Roll Sizing Guide

► Cryo-Babies® & Cryo-Tags® On a Roll

Convenient – Dispensing box assists in labeling individual tubes used in small experiments.

Easy to Write on – PVC labels accept writing from most lab markers including our Solvent Resistant Pens and Teeny Writers.



1. 0.94" x 0.50"
for 0.5ml tubes
2. 1.28" x 0.50"
for 1.5-2.0ml tubes
3. 1.50" x 0.75"
General Purpose

Cat. #	Color	Tag Size (Inches / Millimeters)	Ideal Use	Qty.
1. 77551-W	White	0.94" x 0.50" / 24mm x 13mm	0.5ml tubes	1,000/roll
2. 77550-W	White	1.28" x 0.50" / 33mm x 13mm	1.5ml Tubes	1,000/roll
3. 77554-W	White	1.50" x 0.75" / 38mm x 19mm	General Purpose	1,000/roll

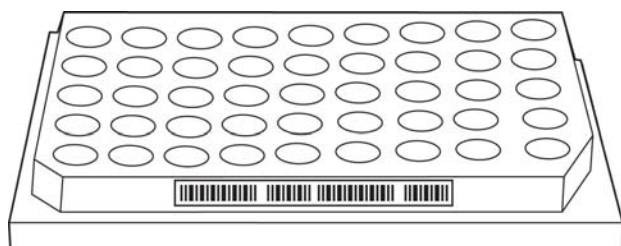
Labels, Printers, Tapes, & Dispensers

► Thermal Transfer Tough-Tags & Cryo-Tags

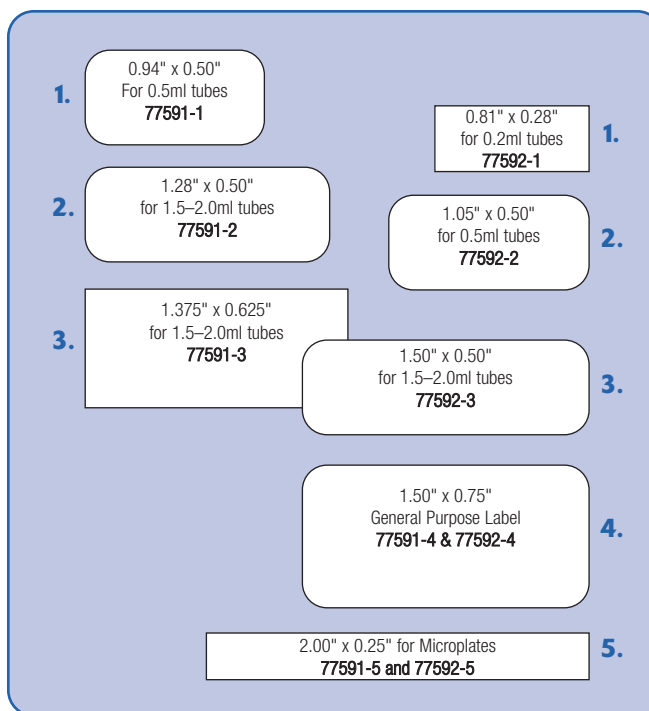
Pre-cut, Peel-Off Labels Designed for Use in Thermal Transfer Printers

Thermal Transfer Tough-Tags and Cryo-Tags are a reliable and convenient way to identify samples with text or a barcode on microtubes, microplates, bottles and other laboratory containers.

- Unique solvent-resistant, acrylic-based adhesive provides excellent cold temperature performance
- Resists degradation from scuffing, chemicals, moisture and wide temperature fluctuations
- Specially coated for use with a resin ribbon that provides the best performance under extreme conditions
- Print as little as one label at a time, eliminating label waste and saving time and money
- Print crisp, clear, professional quality labels



Sizing Guide



Thermal Transfer Labels for Storage in Temperatures from -40°C to 150°C. Boilable and Autoclavable.

Cat. #	Tag Size (Inches)	Tag Size (Millimeters)	Ideal Use	Qty.
1. 77591-1	0.94" x 0.50"	24mm x 13mm	0.5ml tubes	2000/Roll
2. 77591-2	1.28" x 0.50"	32mm x 13mm	1.5ml-2.0ml tubes	2000/Roll
3. 77591-3	1.375" x 0.625"	35mm x 16mm	1.5ml-2.0ml tubes	2000/Roll
4. 77591-4	1.50" x 0.75"	38mm x 19mm	General Purpose	2000/Roll
5. 77591-5	2.00" x 0.25"	51mm x 6mm	Microplates	2000/Roll

Thermal Transfer Labels for Storage in Temperatures from -196°C to 80°C

Cat. #	Tag Size (Inches)	Tag Size (Millimeters)	Ideal Use	Qty.
1. 77592-1	0.81" x 0.28"	20.6mm x 7mm	0.2ml PCR tubes	2000/Roll
2. 77592-2	1.05" x 0.50"	27mm x 13mm	0.5ml tubes	2000/Roll
3. 77592-3	1.50" x 0.50"	38mm x 13mm	1.5ml-2.0ml tubes	2000/Roll
4. 77592-4	1.50" x 0.75"	38mm x 19mm	General Purpose	2000/Roll
5. 77592-5	2.00" x 0.25"	51mm x 6mm	Microplates	2000/Roll

Note: All labels are White and are on 1" I.D. cores with 2,000 per roll.
100% Virgin Polypropylene tubes are recommended for optimal performance. Avoid the use of siliconized surfaces.

Thermal Transfer Accessories

Cat. #	Description	Qty.
77592-50	Zebra Printer – Model TLP 2844	Each
77592-55	Resin Ribbon – 2.50" x 244" (63mm x 74 meters)	Each
77592-60	Labels Unlimited 2.0 (label software)	Each



Labels, Printers, Tapes, & Dispensers

► Direct Thermal Tough-Tags®

For Use in Direct Thermal Printers

- Withstands temperatures from -40°C to 70°C
- Freezable in liquid nitrogen when label ends overlap (not applicable to round labels)
- Resistant to scuffing, smearing and chemicals
- Print barcodes for easy sample tracking
- Limit label waste by printing the quantity required
- Quick and easy setup for PC's or MAC's
- Small printer takes up little space

Cat. #	Label Size (Inches/Millimeters)	Ideal Use	Qty.
1. 77593-1	1.05" x 0.50" / 27mm x 13mm	0.5ml tubes	2000/Roll
2. 77593-2	1.50" x 0.50" / 38mm x 13mm	1.5ml tubes	2000/Roll
3. 77593-3	1.50" x 0.75" / 38mm x 19mm	2.0ml tubes	2000/Roll
4. 77593-4	3/8" diameter / 9.5mm diameter	0.5ml tubes	2000/Roll
5. 77593-5	2.00" x 0.25" / 51mm x 6mm	Microplates	2000/Roll
6. 77593-6	1.50" x 0.50" - 3/8" diameter spot	1.5ml tubes	2000/Roll

Cat. #	Description	Qty.
77593-50	Dymo® LabelWriter® 400	Each

Dymo and LabelWriter are registered trademarks of the Dymo Corp., an Esselte Office Products co.

Note: All labels are White and are on 1" I.D. cores with 2,000 per roll. 100% Virgin Polypropylene tubes are recommended for optimal performance. Avoid the use of siliconized surfaces.

► Solvent-Resistant Pens & Teeny Writers

Solvent Resistant Pens feature an ultra-permanent ink.

- Resistant to xylene, alcohol, acetone and formalin
- Ideal for histology and cytology
- Markings will not run on embedding cassettes or frosted/painted slides and labware, even after repeated washes and solution treatments
- Remove markings with acetic acid, an ethanol/xylene mixture or paraffin. Testing advised before use

Teeny Writers are perfect general use lab markers.

- The Twin-Tip Teeny Writer has a fine tip and an ultra fine tip
- The original Teeny Writer has an extra fine tip
- Both are ideal for writing on Tough-Tags and Tough-Spots
- Use for labeling samples stored at room temperature and not exposed to chemicals and/or caustic agents



Cat. #.	Description	Color	Tip (Millimeters)	Qty.
62053-B	Solvent Resistant	Black	Extra Fine (0.6)	Each
62053-R	Solvent Resistant	Red	Extra Fine (0.6)	Each
62054-B	Twin-Tip	Black	Fine/Ultra Fine (0.7/0.3)	Each
62052-B	Teeny Writer	Black	Extra Fine (0.4)	Each

1. 1.05" x 0.50"
for 0.5ml tubes
77593-1

2. 1.50" x 0.50"
for 1.5-2.0ml tubes
77593-2



3. 1.50" x 0.75"
General Purpose Label
77593-3

4. 3/8" diameter
for 0.5ml tubes
77593-4

3/8"

5. 1.50" x 0.50"
for 1.5-2.0ml tubes
77593-6

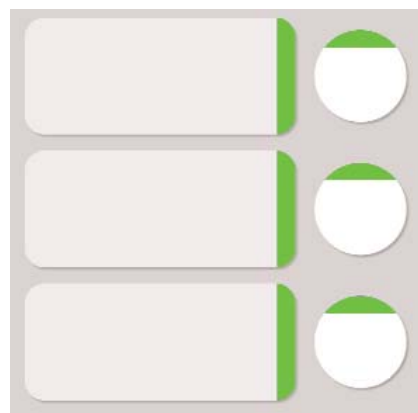
6. 2.00" x 0.25" For Microplates
77593-5

INNOVATIVE LABEL SOLUTIONS

Combo Tough-Tag / Tough-Spot label set allows for quick and easy labeling of tube tops as well as the side of the tube.

► Color-Coded Dual Tough-Tags™

- 500 tag and spot sets per roll
- Matte surface is suitable for accepting pencil, pen or marker writing
- Labels fit 0.5ml – 1.5ml tubes
- Will not come off in rotors, cyclers or racks
- Resistant to extreme temperatures



Catalog #.	Color	Qty.
77539-B	Blue	500/roll
77539-G	Green	500/roll
77539-R	Red	500/roll
77539-W	White	500/roll
77539-Y	Yellow	500/roll

Labels, Printers, Tapes, & Dispensers

► Cryo-Clear™ Laser Labels

Clear Cryogenic Storage Labels
for Use with Laser Printers

"The Choice is CLEAR" – Contents of vials beneath labels remain visible.

Temperature-resistant – From -196°C to 70°C. Cryo-Clear labels remain fully adhered down to -196°C (liquid and vapor phase nitrogen).

Durable – Chemically inert labels resist most organic solvents and caustic agents. Labels adhere to plastics*, glass and metals without cracking, peeling or degrading.

Laser Printable – Label sheets are specially top-coated to accept laser printing and other markings. Heat-resistant, stay-flat sheets will not jam in laser printers.

Innovative – Made with a flexible, vinyl label material and permanent acrylic adhesive. This unique combination expands and contracts together as temperatures fluctuate resulting in a strong and sustained adhesive bond.



Cryo-Clear Laser Labels - Sizing Guide

1. 1.28" x 0.50"
for 1.5 – 2.0ml tubes
2. 0.94" x 0.50"
for 0.5ml tubes

Cat. #	Color	Tag Size (Inches / Millimeters)	Sheet layout	Labels/Sheet	Ideal Use	Qty.
1. 77575-C	Clear	1.28" x 0.50" / 33mm x 13mm	5 Across - 17 Down	85	1.5ml tubes	1,700/pk.
2. 77576-C	Clear	0.94" x 0.50" / 24mm x 13mm	7 Across - 17 Down	119	0.5ml tubes	2,380/pk.

* NOTE: Siliconized surfaces should be avoided. Apply to clean, dry tubes at room temperature. Tubes made of 100% virgin polypropylene are recommended.

† Patented

► Wash-Off Labels™

Rinses Away Leaving No Adhesive Residue

Easy Removal – Labels Wash-Off in 1 rinse cycle at any water temperature

Autoclavable – Labels resist exposure to steam* at 121° C

Environmentally Safe – 100% biodegradable and FDA-compliant

Temperature-Resistant – Long term storage best between 32° F to 70° F (0° C to 21° C)

Laser Printable – Accepts laser printing and other markings



Labels dissolve under running water in less than 30 seconds.

Cat. #	Color	Size (Inches / Millimeters)	Qty.
71826-10	White	2.625" x 1.00" / 67mm x 25mm	750/pk.
71826-20	White	4.00" x 1.00" / 102mm x 25mm	500/pk.

*Build-up of liquid water on the label surface will dissolve the material

► Tough-Tags® on a Roll

Compatible – Tough-Tags are pre-cut, peel-off labels that accept any marking instrument. They are perfectly sized to fit microcentrifuge tubes and other containers in the laboratory.

Convenient – Dispensing box assists in labeling individual tubes used in small experiments.



Tough-Tags on a Roll - Sizing Guide

1. 0.94" x 0.50"
For 0.5ml tubes
2. 1.28" x 0.50"
For 1.5-2.0ml tubes
3. 1.50" x 0.75"
General Purpose Label
(white only)
4. 1.50" x 0.25" For Microplates
(white only)
5. 0.81" x 0.28"
(white only)

Cat. #	Color	Tag Size (Inches / Millimeters)	Qty.
1. 62044-20	White	0.94" x 0.50" / 24mm x 13mm	1,000/roll
62044-x	Specify	0.94" x 0.50" / 24mm x 13mm	1,000/roll
2. 62045-20	White	1.28" x 0.50" / 33mm x 13mm	1,000/roll
62045-x	Specify	1.28" x 0.50" / 33mm x 13mm	1,000/roll
3. 77537-W	White	1.50" x 0.75" / 38mm x 19mm	1,000/roll
4. 77538-W	White	1.50" x 0.25" / 38mm x 6mm	1,000/roll
5. 77536-W	White	0.81" x 0.28" / 21mm x 7mm	1,500/roll

To Specify color, substitute (x) with a letter: B=Blue, 10=Clear, G=Green, O=Orange, R=Red, Y=Yellow [Ordering Example: 62045-R for Red]

Labels, Printers, Tapes, & Dispensers

► Laser Tough-Tags®

Labels for Microcentrifuge Tubes and Other Containers

Temperature-Resistant – From -40°C to 121°C. Tough-Tags resist boiling water baths, autoclaving and moderate freezer temperatures.

Tough – Chemically inert, polyester sheets resist most organic solvents and caustic agents. They adhere to most plastics*, glass and metals without cracking, peeling or degrading.

Compatible – Tubes labeled with Tough-Tags easily slide in and out of centrifuge rotors without binding.

Specially Designed – Label sheets are specially top-coated to readily accept laser printing. Heat-resistant, stay-flat sheets will not jam in laser printers.



Laser sheets are available in individual colors and also in Rainbow Packs

Laser Tough-Tags - Sizing Guide

1. 1.28" x 0.50"
for 1.5-2.0ml tubes

2. 0.94" x 0.50"
For 0.5ml tubes

3. 1.50" x 0.75"
General Purpose Label

4. 0.875"
square for
Microscope
Slides

Packs are available in Individual Colors or in *Rainbow Packs
(5 sheets of each color)

Blue	Green	Orange	Red	Yellow
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Available in CLEAR only

5. 1.50" x 0.75"
For General Purpose

6. 1.50" x 0.50"
For 1.5-2.0ml tubes

7. 1.05" x 0.50"
For 0.5ml tubes

Available in White only

8. 1.00" x 1.00"
for Microscope
Slides

9. 2.50" x 0.50"
for 1.5-2.0ml tubes

10. 0.91" x 0.32"

11. 1.625" x 0.625"
General Purpose Label

12. 2.625" x 0.1875"

Cat. #	Color	Tag Size (Inches / Millimeters)	Sheet layout	Labels/Sheet	Ideal Use	Qty.
1. 77520-X	Specify	1.28" x 0.50" / 33mm x 13mm	5 Across - 17 Down	85	1.5ml tubes	2,125/pk
77520-06	Rainbow*	1.28" x 0.50" / 33mm x 13mm	5 Across - 17 Down	85	1.5ml tubes	2,125/pk
2. 77521-x	Specify	0.94" x 0.50" / 24mm x 13mm	7 Across - 17 Down	119	0.5ml tubes	2,975/pk
77521-06	Rainbow*	0.94" x 0.50" / 24mm x 13mm	7 Across - 17 Down	119	0.5ml tubes	2,975/pk
3. 77522-x	Specify	1.50" x 0.75" / 38mm x 19mm	5 Across - 12 Down	60	1.5ml - 2.0ml tubes	1,500/pk
77522-06	Rainbow*	1.50" x 0.75" / 38mm x 19mm	5 Across - 12 Down	60	1.5ml - 2.0ml tubes	1,500/pk
4. 77523-x	Specify	0.875" x 0.875" / 22mm x 22mm	8 Across - 12 Down	96	Microscope Slides	2,400/pk
77523-06	Rainbow*	0.875" x 0.875" / 22mm x 22mm	8 Across - 12 Down	96	Microscope Slides	2,400/pk
5. 77532-C	Clear	1.50" x 0.75" / 38mm x 19mm	5 Across - 12 Down	60	General Purpose	1,200/pk
77530-C	Clear	1.50" x 0.50" / 38mm x 13mm	5 Across - 16 Down	80	1.5-2.0ml tubes	1,600/pk
6. 77531-C	Clear	1.05" x 0.50" / 27mm x 13mm	6 Across - 16 Down	96	0.5ml tubes	1,920/pk
8. 77526-W	White	1.00" x 1.00" / 25mm x 25mm	8 Across - 10 Down	80	Microscope Slides	2,000/pk
9. 77525-W	White	2.50" x 0.50" / 64mm x 13mm	3 Across - 20 Down	60	0.5ml - 2.0ml tubes	1,500/pk
10. 77524-W	White	0.91" x 0.32" / 23mm x 8mm	7 Across - 22 Down	154	0.2ml PCR tubes	3,850/pk
77529-W	White	2.625" x 0.1875" / 67mm x 5mm	3 Across - 33 Down	99	Microplates	2,475/pk
12. 77528-W	White	1.625" x 0.625" / 41mm x 16mm	4 Across - 16 Down	64	General Purpose	1,600/pk
13. 77527-W	White	8.50" x 11.00" / 216mm x 279mm	Blank Sheet	Blank	Cut to Size	25 Blank Sheets

To Specify color, substitute (x) with a letter: B=Blue, G=Green, O=Orange, R=Red, W=White, Y=Yellow [Ordering Example: 77520-R for Red, 77520-W for White]

* 100% Virgin Polypropylene tubes are recommended for optimal performance. Avoid the use of siliconized surfaces.

Cleaning Aids

► Cleaner and Remover

This All Natural Cleaner Removes What Soap & Water Can't

XENIT contains more than five high-performance ingredients such as Citrus 66, an all natural, highly refined extract of citrus fruit. XENIT is specially formulated to break down the complex molecules found in sticky materials. With this unique character, XENIT may be used to quickly remove labels, decals, and adhesive from glass, wood, vinyl and metals. XENIT removes chewing gum from carpet and upholstery. It cleans permanent marker, crayon, and lipstick from walls, woodwork, and counter tops. XENIT also remove shoe scuffs and heel marks from vinyl and wood flooring, and grease and dirt from carpet, fabrics and upholstery. It even removes dried latex paint.



► XENIT Degreaser

XENIT Degreaser is a powerful, non-flammable solvent cleaner that quickly removes grease, oil, carbon deposits, gums, varnish, and dirt from metal surfaces. It is fast drying and evaporates completely and leaves no residue.

► XENIT Foaming Cleaner

This is the fast, easy way to remove dirt, grime, and food stains, pen ink, soda pop, soap scum. Cleaned surface dry quickly and leave no marks.

► XENIT Citrus Cleaner/Remover

XENIT all natural citrus cleaner is the fast, easy way to remove sticky stuff, stains and gunk. XENIT removes greasy, grimy soils that soap and water can't. Cleans most surfaces in seconds. It cleans crayons, dry latex paint, gum, heel mark, ink, permanent markers, lipstick, shoe polish, sticker, tape, tar and sap.

Ordering

Cat. #	Description	Qty.
60810-10	XENIT Degreaser	16 oz.
60810-20	XENIT Foaming Cleaner	13 oz.
60810-30	XENIT Citrus Cleaner/Remover	10 oz.

► Glass Cleaner – Invisible Glass

Specially formulated, Invisible Glass quickly and easily removes dust, dirt, oil, grease, fingerprints, smoke film, haze and more from glass surfaces, such as windows, mirrors, computer screens, display cabinets, and photocopiers. Invisible Glass contains no water and soaps, surfactants or foams so it will leave no residue that will either streak or haze.



Ordering

Cat. #	Description	Qty.
60811-01	Invisible Glass	19 oz.

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