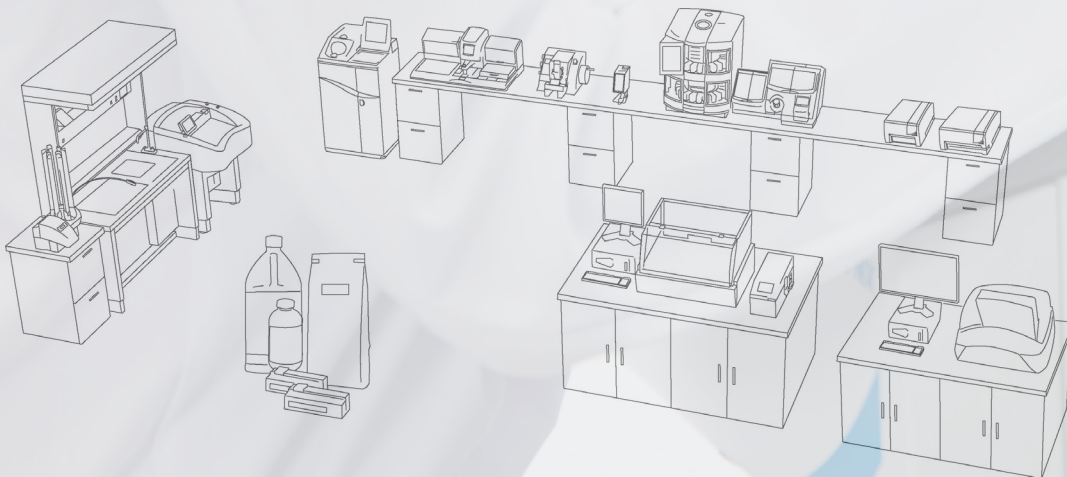


# Cryotomy

built for  
speed



## Experience speed, accuracy, and safety

When it comes to urgent biopsies, getting accurate results to the operating room as quickly as possible is essential in maintaining excellent patient care. Cryostats from EpreDia, along with blades, marking dyes, and other consumables, are designed to get the job done.

### Speed

- Ability to save and repeat preferences, such as section thickness and temperature, to reduce waiting time for rush biopsies
- Each model features an integrated quick-freeze Peltier device that freezes tissue rapidly for quicker, smoother cutting, helping you get to a diagnosis faster

### Accuracy

- Manual and motorized (NX70 only) sectioning options allow for precise control and premium quality sections
- Intuitive touch screen software designed for ease of use, minimizing the risk for error

### Safety

- Optional disinfection features
- Ergonomic band and integrated arm rest controls (NX70 and NX50 only)
- Height adjustable from a sitting or standing position for added user comfort (NX70 and NX50 only)

### The Total Solution

- EpreDia blades designed to cut thin, wrinkle-free sections for analysis
- Line of tissue marking dyes specifically formulated for use with frozen sections
- Get peace of mind with EpreDia extended service contracts that include preventative maintenance and thorough, expedited repairs, ensuring minimal downtime in your laboratory



## Cryostat Range and Selection Guide

With three different cryostat options for your lab, rest-assured that you can find the perfect fit.

Designed to fulfill the needs of both research and clinical laboratories, the CryoStar™ NX70 cryostat introduces a form-fitting design, integrated height control and motorized sectioning. Freeze and section tissue samples more efficiently with improved stability and individually controlled temperature settings on both the object specimen holder and blade carrier.

Get optimal sectioning quality paired with ergonomics and safety with the Cryostar NX50 cryostat. The NX50 cryostat is designed to accommodate the needs of your routine clinical laboratory. This manual cryostat offers a form-fitting design with optional height adjustment, cold disinfection, and Vacutome, allowing users to customize their sectioning experience.

Deliver high-quality results comfortably and efficiently with the HM525 NX cryostat, a high-performance routine cryostat with intuitive software and touch screen for simple, efficient operation. The HM525 NX cryostat offers reliability, advanced ergonomics and an intuitive interface.



CryoStar NX70 Cryostat



CryoStar NX50 Cryostat



HM525 NX Cryostat

| Cryostat features                        | CryoStar NX70 Cryostat | CryoStar NX50 Cryostat | HM525 NX Cryostat |
|--|------------------------|------------------------|-------------------|
| Cold disinfection                        | Optional               | Optional               |                   |
| UV disinfection                          |                        |                        | Optional          |
| Encapsulated microtome                   | ✓                      | ✓                      |                   |
| Chamber temperature < -25 °C             | ✓                      | ✓                      | ✓                 |
| Fast-freeze temperature                  | -57 °C + 3 °C          | -57 °C + 3 °C          | -60 °C            |
| Fast-freeze cooling mechanism            | Peltier                | Peltier                | Peltier           |
| Automatic and immediate defrost          | ✓                      | ✓                      | ✓                 |
| Active blade cooling                     | ✓                      | ✓                      |                   |
| Blade temperature control                | ✓                      |                        |                   |
| Specimen head temperature control        | ✓                      | ✓                      |                   |
| Vacutome                                 | Optional               | Optional               |                   |
| Specimen trimming                        | ✓                      | ✓                      | ✓                 |
| Specimen retraction                      | 20 µm                  | 20 µm                  | 40 µm             |
| Section thickness range                  | 0.5 - 500 µm           | 0.5 - 500 µm           | 1 - 500 µm        |
| Motorized coarse advance                 | ✓                      | ✓                      | ✓                 |
| Motorized cutting                        | ✓                      |                        |                   |
| Cryobar cooling / (fast-freeze) stations | 18 (1)                 | 18 (1)                 | 27 (4)            |
| Touch screen option                      | ✓                      | ✓                      | ✓                 |
| Height adjustable chamber                | ✓                      | Optional               |                   |

## Complete Solutions to Enhance Frozen Sectioning

### Cryostat Consumables

Epredia offers a complete line of consumables to enhance the use of your Epredia cryostat. Epredia offers blades that are crafted using a proprietary steel hardening technology that delivers increased longevity. Our staining kits and mountants are created specifically for use with frozen tissue sections, allowing your laboratory to quickly produce high-quality slides from tissue samples that are ready for analysis.

### Cryostat Service

Your laboratory is a busy place that performs many important tasks – extended service contracts keep you up and running. Yearly preventative maintenance gives you peace of mind that your instrument is performing to the the best of its abilities. Have confidence that if your Epredia cryostat needs service or repair, your instrument repairs will be expedited, ensuring minimal downtime in your laboratory.



## Cryostar NX70 Cryostat

Designed to fulfill the needs of both research and clinical laboratories, the CryoStar NX70 cryostat introduces a form-fitting design, integrated height control and motorized sectioning. Go quickly from mounting tissue to ready-to-cut with quick-freeze and setup features. Section tissue samples more efficiently with improved stability and individually controlled temperature settings on both the object holder and blade carrier.

### First-Rate Sectioning for the Precision You Demand

- Independent cooling of blade holder and specimen head keeps cutting area at set temperatures, even during periods of high use
- Novel knife carrier feed enhances sectioning stability and quality
- Rapid-response temperature control provides active cooling of the specimen head, blade holder, and cryobar while maintaining consistent specimen temperature
- Dedicated low- and high-profile blade holders and separate knife carrier improve stability

### Safe, Comfortable, and In Control

- Large, open chamber with bright LED illumination offers an optimized workspace for operators, featuring eighteen tissue stations and one fast-freeze Peltier for quick, efficient sample preparation
- Optional cold disinfection system provides supplemental surface disinfection in under 60 minutes while the cryostat is still cold
- Light-touch handwheel requires minimal force to operate, limiting repetitive motion discomfort. Motorized cutting helps reduce user fatigue and avoid repetitive motion injury
- Body-contoured design positions the user closer to the chamber to maintain comfortable posture and aids in reducing back and neck strain often associated with frozen sectioning
- Integrated height adjustment (32-44 in. / 82-112 cm), supporting both standing and seated operation with the touch of a button

### Enhanced User-Experience

- Optional Vacutome feature aids in generating wrinkle-free sections and can also be used to remove waste from chamber
- Integrated joystick control and color LCD touchscreen allow for quick, precise adjustments, easy operation for end users, and training for additional users
- Programmable and immediate defrost options

### Physical Specifications

Dimensions (D x W x H):  
39.4 x 29.7 x 32.3-44.0 in.  
(100 x 75.5 x 82-112 cm)  
(adjustable)

Weight: 440 lbs / 200 kg

Power requirements:  
100 V, 50/60 Hz, 10A  
100-120 V, 60 Hz, 10A  
220-230 V, 50/60 Hz, 5A

### Base Model Includes

Five specimen stages (4 x 30 mm, 1 x 40 mm), anti-roll plate, section waste tray, brush shelf, debris brush, sectioning brush, blade handling tool, and operator guide

| Description                 | Configuration | Order Number |
|-----------------------------|---------------|--------------|
| NX70, 110 V (unit only)     | HOMP          | 957000       |
| NX70, 220-240 V (unit only) | HOMP          | 957040       |
| NX70, 110 V (unit only)     | HOMPD         | 957010       |
| NX70, 220-240 V (unit only) | HOMPD         | 957050       |
| NX70, 110 V (unit only)     | HOMPV         | 957020       |
| NX70, 220-240 V (unit only) | HOMPV         | 957060       |
| NX70, 110 V (unit only)     | HOMPDV        | 957030       |
| NX70, 220-240 V (unit only) | HOMPDV        | 957070       |

Please note that instrument order numbers are for the unit only. To purchase a blade holder (low- or high-profile, or steel knife), please see the blade holder section for respective order numbers.

#### Configuration Descriptions

H - Height Adjustment

O - Object Cooling

M - Motorized

P - Peltier

D - Cold Disinfection

V - Vacutome

#### **Features:**

- Adjustable cutting speed from 0 mm/s to 256 mm/s
- Section thickness from 0.5  $\mu$ m to 500  $\mu$ m
- Vertical stroke length of 64 mm
- 48 mm horizontal feed range
- 20  $\mu$ m specimen retraction on return stroke, with optical indication

Order Epredia stainless steel blades, designed for cleanly cutting high-quality frozen sections in your cryostat from Epredia.

#### **You'll need:**

 blades & blade holders

 specimen stages

 staining kits

 embedding media





## Cryostar NX50 Cryostat

Get optimal sectioning quality paired with enhanced ergonomics and safety with the Cryostar NX50. The NX50 is designed to accommodate the needs of your routine clinical laboratory. This manual cryostat offers a form-fitting design with optional height adjustment, cold disinfection, and Vacutome, allowing users to customize their sectioning experience.

### Precise Sectioning

- Active cooling of the specimen head, blade holder, and cryobar maintains consistent specimen temperature
- Reach the ideal temperature for each sample type in just minutes with rapid temperature control
- Precise stepping-motor blade advance for minimal vibration when sectioning
- Microtome design creates a stable sectioning platform for increased precision
- Precise sectioning delivers consistent sections of uniform thickness
- Optional Vacutome feature aids in generating wrinkle-free sections and can also be used to remove waste from the chamber

### Ergonomics and Comfort

- Body-contoured design positions the user closer to the chamber, maintaining comfortable posture
- Large, open work chamber with adjustable LED lighting for enhanced visibility
- Light-touch handwheel requires minimal force to operate
- Optional height adjustment can position the chamber height from 32 to 44 in. (82-112 cm), supporting both standing and seated operation, with the touch of a button
- Touch screen operation with intuitive software to accommodate multiple users

### Operator Safety

- Optional cold disinfection system provides supplemental surface disinfection in under 60 minutes while the cryostat is still cold
- Manual handwheel lock secures the position of the specimen head
- Magnetic blade-transfer tool supports safe removal of the blade from the holder

### Physical Specifications

Dimensions (D x W x H):  
39.4 x 29.7 x 32.3-44.0 in.  
(100 x 75.5 x 82-112 cm)  
(adjustable)

39.4 x 29.7 x 36.6 in.  
(100 x 75.5 x 93 cm)  
(fixed height model)

Weight: 440 lbs / 200 kg

Power requirements:  
100 V, 50/60 Hz, 10A  
110-120 V, 60 Hz, 10A  
220-240 V, 50/60 Hz, 5A

### Includes

Five specimen stages (4 x 30 mm, 1 x 40 mm), anti-roll plate, section waste tray, brush shelf, debris brush, sectioning brush, blade handling tool, and operator guide

| Description                | Configuration | Order Number |
|----------------------------|---------------|--------------|
| NX50,100-120 V (unit only) | OP            | 957250       |
| NX50, 230 V (unit only)    | OP            | 957220       |
| NX50,100-120 V (unit only) | OPD           | 957100       |
| NX50, 230 V (unit only)    | OPD           | 957140       |
| NX50,100-120 V (unit only) | OPV           | 957270       |
| NX50, 230 V (unit only)    | OPV           | 957200       |
| NX50,100-120 V (unit only) | OPH           | 957260       |
| NX50, 230 V (unit only)    | OPH           | 957210       |
| NX50,100-120 V (unit only) | OPHD          | 957110       |
| NX50, 230 V (unit only)    | OPHD          | 957150       |
| NX50,100-120 V (unit only) | OPVD          | 957120       |
| NX50, 230 V (unit only)    | OPVD          | 957160       |
| NX50,100-120 V (unit only) | OPHV          | 957230       |
| NX50, 230 V (unit only)    | OPHV          | 957170       |
| NX50,100-120 V (unit only) | OPHVD         | 957130       |
| NX50, 230 V (unit only)    | OPHVD         | 957240       |

Please note that instrument order numbers are for the unit only. To purchase a blade holder (low- or high-profile, or steel knife), please see the blade holder section for respective order numbers.

#### Configuration Descriptions

O - Object Cooling

P - Peltier

H - Height Adjustment

V - Vacutome

D - Cold Disinfection

#### **Features:**

- Section thickness from 0.5  $\mu$ m to 500  $\mu$ m
- Vertical stroke length of 64 mm
- 48 mm horizontal feed range

Epredia extended service packages offer prompt technical support and national coverage for service or repair, ensuring your instrument will be back up and running as quickly as possible.

#### **You'll need:**

 blades & blade holders

 specimen stages

 staining kits

 embedding media





## HM525 NX Cryostat

Deliver high-quality results comfortably and efficiently with the HM525 NX cryostat, a high-performance routine cryostat with intuitive software and touchscreen for simple, efficient operation. The HM525 NX cryostat offers reliability, advanced ergonomics and an intuitive interface.

### Exceptional Sectioning

- Reliable stepping motor technology delivers reproducible section thickness
- Adjustable chamber temperature control accommodates a wide range of specimens
- Automatic specimen retraction on return stroke protects specimen and reduces carryover artifacts
- Cryochamber features 27 cooled specimen positions, including four fast-freeze stations to keep up with heavy workloads

### Operator Safety

- Mechanical handwheel lock immobilizes the specimen head
- Optional, on-demand UV disinfection protects against surface contamination and occupational exposure to biological pathogens
- Stainless steel chamber and smooth surfaces allows efficient cleaning of the chamber

### User-Friendly and Ergonomic

- Icon-driven interface supports intuitive operation of the cryostat
- Allows rapid selection and adjustment of functions for efficient operation
- Specimen fast-freeze function and chamber brightness can be accessed from the menu
- Light-touch handwheel requires minimal force to operate, increasing comfort
- Additional knee space to support comfortable seated operation
- Body-contoured arm rests improve posture and comfort during periods of prolonged use
- Large, flat top to keep accessories and consumables readily available

### Physical Specifications

Dimensions (D x W x H):  
29.9 x 25.2 x 47.2 in.  
(75.9 x 64 x 119.8 cm) (w/o handwheel)

Weight: 315 lbs / 143 kg

Power requirements:  
100 V, 50 Hz, 12A  
100 V, 60 Hz, 12A  
115 V, 60 Hz, 12A  
220/230 V, 50 Hz, 6A  
220 V, 60 Hz, 6A  
240 V, 50 Hz, 6A

### Includes

Six specimen stages (30 mm),  
freezing medium (118 mL),  
cryostat oil (118 mL), section  
waste tray, debris brush,  
sectioning brush, tools and  
operator guide.

| Description  | Order Number |
|--|--------------|
| <b>HM525 NX (unit only)</b>                          |              |
| HM 525 NX, 115 V (unit only)                         | 956640       |
| HM 525 NX, 220-230 V (unit only)                     | 956650       |
| <b>HM525 NX with UV disinfection (unit only)</b>     |              |
| HM525 NX with UV disinfection, 115 V (unit only)     | 956641       |
| HM525 NX with UV disinfection, 220-230 V (unit only) | 956651       |

**Features:**

- Chamber cooling to -35 °C
- Integrated peltier fast-freezing device rapidly cools to -60 °C
- Section thickness from 1 µm to 500 µm
- Vertical stroke length of 60 mm
- 28 mm horizontal feed range
- 40 µm specimen retraction on return stroke
- X/Y specimen orientation with 360° Z-axis rotation

**You'll need:**
 blades & blade holders

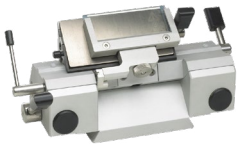
 specimen stages

 staining kits

 embedding media

## Cryostat Blade Holders

| Description                                | Order Number | CryoStar NX70 | CryoStar NX50 | HM525 NX |
|--|--------------|---------------|---------------|----------|
| <b>Blade holders for disposable blades</b> |              |               |               |          |
| EC70 blade holder                          | 705630       |               |               | ✓        |
| EC blade holder                            | 705470       |               |               | ✓        |
| Low-profile blade holder                   | 705840       | ✓             | ✓             |          |
| High-profile blade holder                  | 705940       | ✓             | ✓             |          |
| <b>Knife carriers for solid knives</b>     |              |               |               |          |
| Standard                                   | 705460       |               |               | ✓        |
| Standard knife carrier                     | 705950       | ✓             | ✓             |          |



### EC70 Disposable Blade Holder for HM525 NX

- Suitable for high- and low-profile disposable blades, with clearance angle adjustment
- Precision dovetail guide and quick clamping mechanism allows for easy movement
- Includes anti-roll guide and two glass anti-roll plates (69.5 mm)



### EC Disposable Blade Holder for HM525 NX

- Suitable for high- and low-profile disposable blades, with clearance angle adjustment
- Precision dovetail guide and quick clamping mechanism allows for easy movement
- Includes anti-roll guide and two glass anti-roll plates (39.5 mm)



### Standard Blade Holder for HM525 NX

- For use with standard solid knives
- Clearance angle adjustment and removable clamping jaws
- Precision dovetail guide and quick clamping mechanism allows for easy movement
- Includes anti-roll guide and two glass anti-roll plates (69.5mm)

# Disposable Blades for Cryostats

## Low-Profile Blades



### MX35 Ultra™ Low-Profile Blade

Blades feature a proprietary steel hardening technology (Pink Technology) that delivers unbeatable longevity, making them excellent for cutting frozen sections.

3053835 | Blade angle: 34° | 50 / pack



### MX35 Premier +™ Low-Profile Blade

Blades are designed to be extra sharp with an extended cutting life. Excellent for hard tissues.

3052835 | Blade angle: 34° | 50 / pack



### MX35 Premier™ Low-Profile Blade

Blades are designed for routine histology and are good for a variety of tissue types, including hard tissue.

3051835 | Blade angle: 34° | 50 / pack



### MB35™ Premier Low-Profile Blade

Blades are best for routine applications and have consistent edge sharpness for high-quality thin sections. Feature superior edge stability.

3050835 | Blade angle: 34° | 50 / pack



### MB22 Premier™ Low-Profile Blade

Blade is designed with a steeper angle that allows users to cut thinner sections.

3050822 | Blade angle: 22° | 50 / pack

High-Profile Blades



HP35 Ultra™ High-Profile Blade

Blades designed for use with cryostats. Proprietary steel hardening technology (Pink Technology) delivers increased longevity.

3153735 | Blade angle: 34° | 50 / pack



HP35N Ultra™ High-Profile Blade

Blades designed similarly to the HP35 Ultra High-Profile Blade, but with no PTFE Coating.

3151735 | Blade angle: 34° | 50 / pack

| Blade Type             | Low-Profile Blades |                |              |              |              | High-Profile Blades |             |
|------------------------|--------------------|----------------|--------------|--------------|--------------|---------------------|-------------|
| Description            | MX35 Ultra         | MX35 Premier + | MX35 Premier | MB35 Premier | MB22 Premier | HP35 Ultra          | HP35N Ultra |
| Order number           | 3053835            | 3052835        | 3051835      | 3050835      | 3050822      | 3153735             | 3151735     |
| Edge angle             | 34°                | 34°            | 34°          | 34°          | 22°          | 34°                 | 34°         |
| Cryostat compatibility | Best               | Good           | Good         | Good         | Best         | Best                | Good        |



Richard Allan Scientific™ Edge-Rite™ Disposable Microtome Blades

Made of surgical-grade steel, low- and high-profile blades are specially coated to increase longevity and optimize section quality.

- Low-profile blades are 20% thicker than traditional blades to increase knife edge stability, which facilitates usage in cryostats
- Low-profile blades are 5% longer, allowing for more sections per blade

Low-Profile (4280L) | High-Profile (4275H) | 50 / pack



Shandon Premium Disposable Microtome Blades

Epredia Shandon premium high-profile disposable blades are available in non-coated and PTFE-coated styles.

Premium High-Profile with no coating (1001259) | 50 / pack

Premium High Profile with PTFE-coating (1001593) | 50 / pack

## Specimen Stages

| Description                        | Order Number | CryoStar NX70 | CryoStar NX50 | HM525 NX |
|------------------------------------|--------------|---------------|---------------|----------|
| <b>Specimen Stages</b>             |              |               |               |          |
| 20 mm specimen stage               | 715700       |               |               | ✓        |
| 30 mm specimen stage (color coded) | 715220       |               |               | ✓        |
| 30 mm specimen stage               | 715710       |               |               | ✓        |
| 30 mm specimen stage               | 715600       | ✓             | ✓             |          |
| 30 mm specimen stage; red          | 715870       | ✓             | ✓             |          |
| 30 mm specimen stage; green        | 715880       | ✓             | ✓             |          |
| 30 mm specimen stage; blue         | 715890       | ✓             | ✓             |          |
| 30 mm specimen stage; gold         | 715900       | ✓             | ✓             |          |
| 40 mm specimen stage (color coded) | 715230       |               |               | ✓        |
| 40 mm specimen stage               | 715720       |               |               | ✓        |
| 40 mm specimen stage               | 715610       | ✓             | ✓             |          |
| 60 mm specimen stage               | 715620       | ✓             | ✓             |          |
| 50 x 50 mm specimen stage          | 715730       |               |               | ✓        |
| 55 x 55 mm specimen stage          | 715740       |               |               | ✓        |
| 60 x 55 mm specimen stage          | 715750       |               |               | ✓        |
| 75 x 70 mm specimen stage          | 715760       |               |               | ✓        |
| <b>Cryo-Molds</b>                  |              |               |               |          |
| Cryo-mold, 10 mm                   | 570400       | ✓             | ✓             | ✓        |
| Cryo-mold, 15 mm                   | 570380       | ✓             | ✓             | ✓        |
| Cryo-mold, 22 mm                   | 570390       | ✓             | ✓             | ✓        |





## Staining Kits



### Frozen Section Staining Kit (145)

Ideal for laboratories that process frozen sections. Works well for staining tissue mounted on coverglass.

- Sturdy cover with piano hinge seals beakers to minimize evaporation
- Rubber feet on rack protect table surface
- Glass beakers have a capacity of 200 mL and are 10 cm tall
- Slide holder will hold ten 76 x 25 mm slides
- Stainless steel rack measures 21.6 x 48.3 x 22.6 mm
- Kit includes twelve beakers, a stainless steel slide holder, and a heavy-gauge stainless steel support rack with six round openings to hold beakers

## Embedding Media



### Shandon Cryomatrix™ Embedding Medium

Outstanding embedding medium used to support tissue for frozen sectioning.

- Forms a firm bond with the specimen holder that secures and supports tissue
- Removed during staining
- Freezes quickly, sections smoothly, and dissolves in water without residue

120 mL | 4 / pack



### Shandon M-1 Embedding Matrix

Water-soluble, clear embedding medium.

- Particularly effective on specimens with high water content such as eyes and CNS
- Optimum sectioning temperature of -12 °C to -13 °C

180 mL | 1 each



### Cryochrome

- Outstanding embedding matrix used to support tissue for frozen sectioning
- Easy tracking and identification with multiple color options
- Formulated with physical characteristics identical to EpreDia™ Cryomatrix™ embedding medium



### Neg-50 Frozen Section Medium

- Water-soluble frozen section medium that yields high-quality sections down to -50 °C without chatter
- Leaves no residue after staining
- Easy tracking and identification with varying colored matrix

| Description                                  | Quantity | Order Number |
|--|----------|--------------|
| Shandon Cryomatrix Embedding medium (120 mL) | 4 / pack | 6769006      |
| Shandon M-1 Embedding Matrix (180 mL)        | ea.      | 1310         |

| Description                                    | Quantity | Order Number |
|--|----------|--------------|
| Cryochrome blue, 120mL                         | 4 / pack | 9990422      |
| Cryochrome yellow, 120 mL                      | 4 / pack | 9990423      |
| Cryochrome green, 120 mL                       | 4 / pack | 9990428      |
| Cryochrome pink, 120 mL                        | 4 / pack | 9990429      |
| Cryochrome sampler (one of each color), 120 mL | 4 / pack | 9990426      |

| Description                                 | Quantity | Order Number |
|---|----------|--------------|
| Colorless Neg-50, 4 oz (118 mL)             | 2 / case | 6502         |
| Blue Neg-50, 4 oz (118 mL)                  | 2 / case | 6502B        |
| Green Neg-50, 4 oz (118 mL)                 | 2 / case | 6502G        |
| Orange Neg-50, 4 oz (118 mL)                | 2 / case | 6502O        |
| Pink Neg-50, 4 oz (118 mL)                  | 2 / case | 6502P        |
| Yellow Neg-50, 4 oz (118 mL)                | 2 / case | 6502Y        |
| Colorless Neg-50 4 oz (118 mL)              | 6 / case | 6506         |
| Neg-50 sampler (one of each color) (118 mL) | 6 / case | 6505M        |