# HISTOLOGY PRODUCT GUIDE







Polysciences, Inc. manufactures specialty chemicals and reagents for histology, light microscopy and anatomic pathology as well as other clinical, research and life sciences applications.

Our full product catalog contains thousands of unique and specialty products, such as embedding media, special stain kits, tissue marking dyes, mounting media, fixatives, certified and fluorescent dyes & stains, IHC and *in situ* products used by histology professionals. We work everyday to provide high quality products to support the investigative and diagnostic vision of histology laboratories.

To learn more please visit Polysciences.com.

# **CONTENTS**

FIXATION	4
DECALCIFYING	6
TRANSPORT BUFFERS	6
GROSSING	7
PROCESSING	8
EMBEDDING - FROZEN	8
EMBEDDING - PARAFFIN	10
EMBEDDING - PLASTIC	11
MICROTOMY / SECTIONING	13
ROUTINE STAINS	
BLUING REAGENTS	16
SPECIAL STAINS	17
MOUNTING MEDIA	20
IMMUNOHISTOCHEMISTRY	21

# **FIXATION**

#### **GLUTARALDEHYDE**

Polysciences was the first to develop a superior grade of glutaraldehyde suitable for immunochemical techniques. Each batch of vacuum-distilled glutaraldehyde manufactured by Polysciences is analyzed to maintain consistent high quality and freedom from contaminants that destroy antigenicity. Each ampoule is fitted with an ampoule cracker for added safety.

Biological grade glutaraldehyde has been purified to minimize byproduct formation and maximize shelf life. It should be suitable for most morphological studies. For more stringent purity and longer stability, use EM grade glutaraldehyde. EM grade is recommended for histochemical or immunological techniques.

Polysciences offers highly-purified 8%, 25%, 50%, and 70% EM Grade glutaraldehyde solutions that are free of contaminants. Studies have shown that Polysciences' clear, colorless, EM grade glutaraldehyde is practically free of undesirable polymeric product impurities.

#### **APPLICATIONS**

Histochemical techniques Immunological techniques

#### **Key Features**

- Suitable for immunochemical techniques
- Highly purified EM Grade

Available in Biological and EM Grade: Glutaraldehyde, 25%
Biological Grade Cat #00376, Glutaraldehyde, 50% Biological
Grade Cat #00377, Glutaraldehyde, 8% EM Grade (Glass Distilled)
Cat #07710, Glutaraldehyde, 25% EM Grade (Glass Distilled) Cat
#01909, Glutaraldehyde, 50% EM Grade (Glass Distilled) Cat
#18428, Glutaraldehyde, 70% EM Grade (Glass Distilled) Cat #01201
EM Grade, 50% (glass vacuum distilled), is recommended for histological
or immunological techniques demanding purity and longer stability.

Cat. #: 00377 Glutaraldehyde, 50% Biological Grade Size: 500ml, 1L, 4x1L
• Cat. #: 18428 Glutaraldehyde, 50% EM Grade (Glass Distilled) Size: 100ml, 10x10ml, 5x100ml



### **ZINC FORMALIN FIXATIVE, PH 6.25**

Non-precipitating fixative that can be used with automated and manual methods. Zinc formalin is best used as a primary fixative that minimizes denaturation. Excellent morphological preservation of nuclear and cytoplasmic components. Can replace neutral buffered formalin for routine tissue and immunohistochemical procedures. Specimens initially fixed in buffered formalin may be post-fixed in Zinc Formalin for a week without an effect. (TDS #458)

#### **APPLICATIONS**

Routine Tissue Staining Special Staining IHC Staining Histochemical Stains

# **Key Features**

- Less crosslinking than formalin
- Can be used as a post fixative
- 7 day storage without any adverse effects
- Complete fixation within 4-6 hours, rather than 12+ hours required by formalin.

Cat. #: 21516 Size: 3.75L

### **BOUIN'S FIXATIVE (BOUIN'S FLUID)**

Picric acid, formalin and acetic acid fixative. Excellent for use in preserving soft and delicate tissue structures. Shrinking induced by the picric acid is offset by the swelling of the glacial acetic acid. (TDS #866)

Cat. #: 16045 Size: 1L, 1 gal



#### **FAST FIX**

Rapid fixation method for frozen sections. Frozen sections are often performed under extreme pressure and timed according to CAP regulations, therefore it is in the interest of patient care to get the best stained section to the pathologist as quickly as possible. Safe for all tissue types. (TDS #834)

Cat. #: 24607 Size: 100ml, 500ml

# FLOW FIX PARAFORMALDEHYDE FIXATIVE KITS, 1% & 2%

Sodium azide-free buffer comprised of a neutral pH-buffered saline that contains paraformaldehyde. (TDS #810, #863)

Cat. #: 25037 Size: 1 kit (1% w/v) • Cat. #: 25085 Size: 1 kit (2% w/v)

# FORMALDEHYDE, 10%, METHANOL-FREE, ULTRA PURE

Suitable for both electron and light microscopy. Easily penetrates large specimen with fast penetration but slow crosslinking. When used in combination with glutaraldehyde, it fixes delicate tissues such as brain in vascular perfusion.

Cat. #: 04018 Size: 1L, 4x1L

# FORMALIN, 10% NEUTRAL BUFFERED

(PHOSPHATE BUFFER)

Most commonly-used fixative in histology laboratories. Used for routine histological staining; can be used for immunohistochemistry.

Cat. #: 08379 Size: 3.75L, 20L

# **MODIFIED DAVIDSON'S FIXATIVE** (HARTMANN'S FIXATIVE)

Recommended fixative to use for testes and eyes to achieve better morphology compared to formalin. Overnight fixative for the visualization of lymph nodes in radical dissection specimens. Helpful with both breast and colon specimens by turning lymph nodes white. (TDS #1903)

Cat. #: 24355 Size: 500ml, 1 gal

#### **HOLLANDE'S FIXATIVE**

Excellent for large and small gastric tissue, GI biopsies or any tissues that contain large amounts of inflammatory and mucinous cells. Hollande's solution is a preferred fixative for flagellates and ciliates demonstrated with silver stains. Useful for routine surgical specimens.

Cat. #: 24354 Size: 500ml, 1 gal



### **HOPE® FIXATIVE STARTER KIT**

The HOPE fixation technique is primarily used for the preparation of paraffin embedded tissue sections. In contrast to other fixation methods, HOPE does not completely denature or crosslink structural proteins, enzymes and nucleic acids.

Tissue specimens fixed with the HOPE technique allow for greater morphology and retrospective studies on the molecular level. (TDS #767) **Kit Contains:** HOPE Fixative System I (Cat #24823) & II (Cat #24824) \*HOPE manufactured and registered trademark by DCS, Innovative Diagnostik Systeme, Germany.

Cat. #: 24884 Size: 1 kit

#### KARNOVSKY'S FIXATIVE

A formaldehyde/glutaraldehyde fixative commonly used in EM for good structural preservation. Pre-measured in ampoules for 1-step preparation. (TDS #974) **Kit Contains:** 1x10ml 50% Glutaraldehyde, 2x10ml 16% Formaldehyde, 50ml 0.2M Phosphate Buffer.

Cat. #: 22872 Size: 5 kits

#### POLY/LEM FIXATIVE, METHANOL-FREE

Light and Electron Microscopy fixative. Popular methanol-free fixative is a formaldehyde-based material formulated to eliminate the need to select a fixative based on the type of microscopy employed. (TDS #303)

Cat. #: 16864 Size: 3.75L, 4x3.75L



# **DECALCIFYING**

#### **POLY-NOCAL & FIXATIVE**

Formic acid and formaldehyde based solution designed to fix and decalcify in one easy, convenient step. Small histological specimens, such as bone marrow, will achieve softening sufficient for sectioning in four hours. (TDS #523)

Cat. #: 24163 Size: 1L, 3.8L

#### POLY-NOCAL END POINT DETERMINATION KIT

Avoid over-and under-decalcification problems. Control of decalcification is an important part of tissue morphology. Kit includes all the necessary materials you need to determine endpoint decalcification accurately, consistently and conveniently. Each kit typically performs ~200 tests. (TDS #524)

Cat. #: 24119 Size: 1 kit



#### **SUPER DECALCIFIER I: DELICATE**

Save Time - Decalcify in as little as 3 hours! Ready-to-use for human and animal tissue. Recommended for IHC, special stains and routine stains for mildly-calcified specimens such as bone marrow biopsies. (TDS #786)

Cat. #: 24888 Size: 120mL, 500ml, 1L



### **SUPER DECALCIFIER II: HEAVY DUTY**

Designed for safe, longer-term decalcification of hard compact bone, femoral heads, above and below the knee amputations. Extremely effective and versatile decalcifier. (TDS #786)

Cat. #: 24887 Size: 120mL, 500ml, 1L

# **TRANSPORT BUFFERS**

#### MICHEL'S TRANSPORT MEDIUM

Holding medium/transport buffer for tissue transport. Specimens can be held at room temperature for five days in transport medium before processing.

Cat. #: 24353 Size: 500ml

#### **POLYTRANSPORT BUFFER**

Preserve specimens from surgery to the point of grossing for fixation prior to further processing. Specially formulated transport medium designed to preserve tissue in a viable state during transport by maintaining osmolarity and pH for 24-48 hours. No washing of specimens necessary prior to placing in fixative or rapid freezing. Prevents bacterial growth and denaturing or crosslinking of proteins. (TDS #631)

Cat. #: 24311 Size: 250ml, 500ml

# **GROSSING**

#### MOHS LAB STARTER KIT WITH DIAGNOSTIC STAINS

All reagents needed to start a complete Mohs lab. From dye marking, cryo-embedding, melanin bleaching, staining and mounting medium to a finished slide that can be viewed under the microscope within minutes.

Our Mohs Lab Starter Kits are designed to perfect orientation of excised surgical biopsies. This method of permanently marking multiple margins of the specimen was originally documented by Dr. Frederic Mohs to aid in skin cancer diagnosis and remains a highly beneficial dermatopathology technique for surgeons and pathologists. The marking dyes applied to the specimen are impervious to processing reagents, embedding mediums and staining reagents. This allows the important markings to be visualized by the pathologist to aid in diagnosis. (TDS #1100)

#### **APPLICATIONS**

Skin biopsy Skin lesion Dermatopathology

#### **Key Features**

- Dyes will bind permanently to the tissue surface within 1 to 2 minutes when allowed to air dry
- No setting spray required
- 5 Color Tissue Marking Dye Kit
- Includes a free Melanin Bleach Kit
- Includes a free Peel-A-Way® Disposable Embedding Molds Sampler Pack
- Reduce hazardous chemicals in the lab

Kit Components: PolyFreeze Frozen Mounting Medium (6 x 4oz), Blue Tissue Marking Dye (2oz), Black Tissue Marking Dye (2oz), Green Tissue Marking Dye (2oz), Red Tissue Marking Dye (2oz), Yellow Tissue Marking Dye (2oz), Convenient wooden holder and application sticks, Aqua-Poly/ Mount (5 x20ml), Tissue Tack (+ charged) Microscope Slides, CitraMount™ Medium (100ml), Hematoxylin, Gill's 3 (1L) Eosin 0.5%, alcoholic (1L), Lithium Blue (1L) Delicate Melanin Bleach Kit (2 x 250ml) Delicate formula for removing melanin pigment in cells of malignant melanomas created especially for Special Stains and IHC. Also includes a Peel-A-Way Disposable Embedding Molds Sampler Pack. Peel-A-Way Molds are easy to use and save time - Unique design will "Peel-A-Way" from a solidified embedded block, providing a perfectly smooth, flat surface for cutting specimen. Note: All kit replacement components may be purchased separately; various sizes available.

Cat. #: 26418 Size: 1 kit



#### MOHS LAB STARTER KIT

All the reagents needed to start a complete Mohs lab. From cryotomy, fixation, staining and orientation, to the complete production of a finished slide that can be viewed within minutes. (TDS #1100) **Kit Contains:** #24108-1 Tissue Marking Dye (5x2oz colors with stand & applicator sticks), #19636-1 PolyFreeze Tissue Freezing Medium (6x4oz), #18606-5 Aqua-Poly / Mount, #24216-1 Tissue Tack + Charged Microscope Slides, #24909-1 Delicate Melanin Bleach Kit for Special Stains & IHC (2x250mL), #24214-100, CitraMount™ Medium (100ml), #18646D-1 Peel-A-Way Disposable Embedding Molds Sampler Pack

Cat. #: 26417 Size: 1 kit



#### TISSUE MARKING DYES

Our Tissue Marking Dyes are designed to mark areas of excised surgical specimens to aid in orientation. This method of permanently marking the margins of tissue specimens is very beneficial to surgeons and

pathologists testing for skin cancer. It also very beneficial in assuring perfect orientation of excised surgical biopsies. Marking the lumen of a vas deferens biopsy, for example, is very essential to confirm proper orientation when embedding and cutting; to aid technologist in capturing a complete representation of specimen biopsy. (TDS #445)

#### **APPLICATIONS**

Excised fresh tissue
Excised formalin-fixed tissue

### **Key Features**

- No post fixative required
- Fast drying
- Dyes can be used on fresh or formalin-fixed specimens
- High quality opaque pigments
- Maintains brilliant color through all phases of processing

Available in two sizes: 2 oz. and 8 oz. Tissue Marking Dye in 6 colors: Blue, Green , Orange, Purple, Red, & Yellow.

Cat. #: 24772 Size: 1 kit (7 Color Kit) • Cat. #: 24108 Size: 1 kit (5 Color Kit)

# **PROCESSING**

#### ACETONE, 99.5% - EM GRADE

Commonly-used fixative for cytology specimens. Recommended for use when urates are to be demonstrated. Rate of penetration is fast.

Cat. #: 01921 Size: 1L, 4x1L

### ALCOHOL REAGENT, 100%, HISTOLOGY GRADE

Suitable for most histological procedures. Our histology grade alcohol reagent is composed of 90 parts ethyl alcohol, 5 parts methyl alcohol and 5 parts isopropyl alcohol, v/v blend. Preferred mixture for dehydrating tissue samples.

Cat. #: 09860 Size: 1 gal



#### **CLEAR-ADVANTAGE** (XYLENE SUBSTITUTE)

Safe xylene substitute for processing, staining and coverslipping. Clear-Advantage is virtually odorless. Tissue morphology and cell structure definition is exceptional. Compatible with most automated processing units.

Cat. #: 24770 Size: 1 gal, 4x1 gal

#### PARACLEAR ODORLESS (XYLENE SUBSTITUTE)

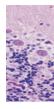
ParaClear is an odorless xylene substitute. It will remove alcohol during the final steps of routine tissue processing and is miscible with paraffin for infiltration. It has a higher flash point than xylene, reducing the flammability danger to the laboratory. (TDS #671)

Cat. #: 22463 Size: 3.8L, 4x3.8L

#### **POLY/CLEAR SOLVENT (XYLENE SUBSTITUTE)**

A pleasant citrus odor replaces xylene odor when you switch to Poly/Clear Solvent in your laboratory as your paraffin clearing agent. This low-toxicity material is for use in histology and cytology procedures whenever xylene is used. The high flash point and biodegradability of this product makes it an attractive alternative. (TDS #301)

Cat. #: 17326 Size: 1 gal, 4 gal



### XYLENE, HISTOLOGY GRADE

Routine clearing agent used in histology. Also, compatible with Canada balsam in oilimmersion microscopy.

Cat. #: 08389 Size: 1 gal

### **EMBEDDING - FROZEN**



#### PEEL-A-WAY® MOLDS

Disposable paraffin molds designed to "Peel-A-Way" from the solidified embedded block.

Polysciences' Peel-A-Way embedding molds are useful for plastic, frozen and epoxy embedding. The unique polyethylene construction is designed to peel away from the solidified block, eliminating the need for release agents and block trimming.

#### **APPLICATIONS**

PolyFreeze (Tissue freezing medium) GMA (glycol methacrylate resin) MMA (methyl methacrylate resin) Epoxy

#### **Key Features**

- Easy to use and saves time Unique design will "Peel-A-Way" from a solidified embedded block
- Versatile Can be used with PolyFreeze, JB-4®, GMA, MMA and epoxy
- Uniform surface to aid in orientation during embedding

Available in 5 convenient sizes: #18985 - Truncated Molds T8 (Specifications: Polyethylene, 22mm x 22mm square, truncated to 8mm. 20mm deep) #18986 - Truncated Molds T12 (Specifications: Polyethylene, 22mm x 22mm square, truncated to 12mm. 20mm deep), #18646A - Square Molds S22 (Specifications: Polyethylene, 22mm x 22mm square, 20mm deep) #18646B - Rectangular Molds R30 (Specifications: Polyethylene, 22mm x 30mm. 20mm deep) #18646C - Rectangular Molds R40 (Specifications: Polyethylene, 22mm x 40mm. 20mm deep)

Cat. #: 18985 Size: T8, 1 case (288 molds) • Cat. #: 18986 Size: T12, 1 case (288 molds) • Cat. #: 18646A Size: S22, 1 case (288 molds) • Cat. #: 18646B Size: R30, 1 case (288 molds) • Cat. #: 18646C Size: R40, 1 case (264 molds) • Cat. #: 18646D Size: Asst, 1 pack (48 molds)



# POLYFREEZE (TISSUE FREEZING MEDIUM)

PolyFreeze is a support matrix or form of embedding medium for fresh frozen tissue sectioning. This medium freezes quickly supporting the tissue for sectioning at  $4\mu$  and up at temperatures of -8°C and below. PolyFreeze is compatible with IHC procedures and does not cause autofluorescence. PolyFreeze is available in 4 convenient colors (green, yellow, red, and blue) as well as clear colorless. Colors are convenient for the small or hard to see biopsies, as well as, the white or lighter pigmented specimen. Colors can also be used to color coordinate specific tissues when desired. (TDS #678)

#### **APPLICATIONS**

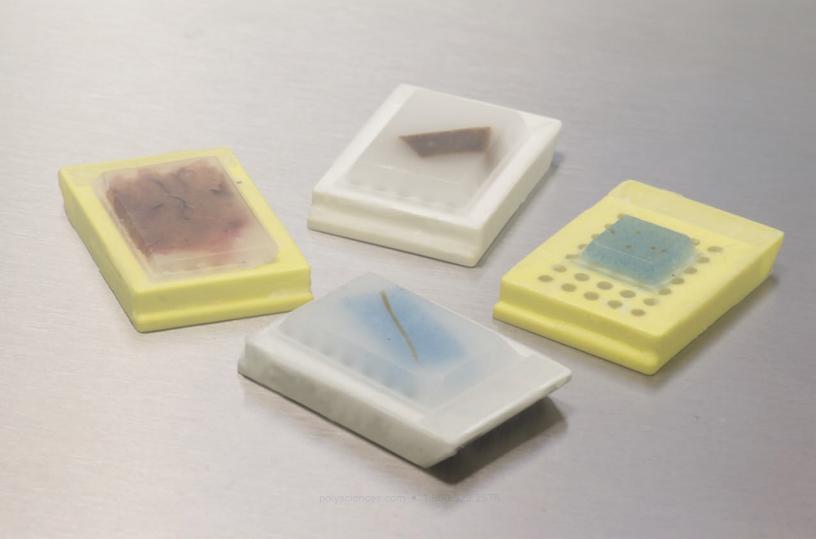
Use PolyFreeze with Peel-A-Way disposable embedding molds to assist in proper tissue orientation. PolyFreeze can also be used with the cryostat heat extractor.

#### **Key Features**

- Rapid tissue freezing in 3 to 5 minutes
- Colors provide excellent contrast to white and light colored tissue
- Great for small biopsies

Available in our standard Clear and 4 additional colors. Each case contains 6x120ml of our PolyFreeze cryostat embedding medium.

Cat. #: 19636 PolyFreeze - Clear • Cat. #: 25113 PolyFreeze - Green • Cat. #: 25114 PolyFreeze - Yellow • Cat. #: 25115 PolyFreeze - Red • Cat. #: 25116 PolyFreeze - Blue



# **EMBEDDING - PARAFFIN**

#### POLYFIN® PARAFFIN

This is a mixture of fine paraffin waxes and copolymer alloys in convenient pellets. PolyFin produces ultrathin compression free ribbons. It functions flawlessly in pressure/vacuum fluid flow processors and tissue embedding centers.

PolyFin provides maximum support for both hard and soft tissue samples while maintaining excellent clarity. The exceptional paraffin formulation eliminates the need to reduce the waterbath temperature when cutting CNS tissue sections such as brain, nerves and spinal cord. (TDS #429)

#### **APPLICATIONS**

Formalin fixed soft and hard tissue for routine or special staining techniques HOPE®-Fixed tissue RNA and protein analysis

### **Key Features**

- Provides maximum support for both hard and soft tissue samples
- Appropriate for processing and embedding
- Produced minimal shrinkage or expansion when the cut sections were floated on a water bath.
- Supports one set temperature for all tissue types
- Produces wrinkle-free sections due to excellent infiltration

Cat. #: 19562 Size: 1 case, (8 x 1kg)

### POLYPRESSTM TISSUE EMBEDDING TAMPERS (COMBO)

PolyPress™ Tissue Embedding Tampers aid in the orientation of samples during embedding. The two sizes combined in one pack provide the necessary options when embedding various sized tissues

#### **APPLICATION**

Paraffin embedding

#### **Key Features**

- Long handle for easy gripping
- Easy to clean and reduces build up
- Metal keeps paraffin from sticking to fingers
- 2 Convenient sizes: large (Cat. #25964) 15mm x
   15mm & small (Cat. #25960) 10mm x 10mm
- No need for forceps

Cat # 26013 Size: 2pk



#### GEMCUTTM EMERALD PARAFFIN

High polymer paraffin for routine embedding and cutting. Specially formulated for high humidity environments and gives superior cutting with low compression. The color

of the wax makes it easier to visualize and orient small biopsies even while using eosin, methylene blue or tissue marking dyes. (TDS #691) Melting Point: 56-58°C.

Cat. #: 24364 Color: Emerald Size: 1 case (4x2kg)



# PEEL-A-WAY® MICRO-CUT PARAFFIN

Low polymer content formulation gives improved viscosity, infiltration and embedding. The translucent appearance of

the paraffin allows for excellent tissue visibility. The lower polymer content also makes deparaffinization easier with all types of clearing agents. Available in two melting points. (TDS #525A)

Cat. #: 24198 MP: 56°-58°C Size: 1 case (4x2.5kg) • Cat. #: 24202 MP: 62°-64°C Size: 1 case (4x2.5kg)

#### PEG 4000 RESIN

This water-soluble, nonionic material can be used like paraffin to infiltrate and embed tissue. Melting point is 53°-56°C. Easily removed from sections with 95% ethanol for immunocytochemical and x-ray microanalytical techniques. (TDS #279)

Cat. #: 16861 Size: 250g

• 1.800.523.257



# **EMBEDDING - PLASTIC**



#### JB-4® EMBEDDING KIT

JB-4 is a water-soluble, 2-hydroxyethyl methacrylate (HEMA, also known as glycol methacrylate, GMA) based plastic resin kit used in the preparation of embedded samples for high resolution light microscopy (HRLM). JB-4

embedded tissues yield semi-thin sections ( $0.5\mu-2\mu$ ) with superior morphological structure preservation compared to paraffin processed tissues. JB-4, being a water-soluble media, does not require dehydration with absolute alcohol except for dense blood or fatty tissue specimens. Clearing agents such as xylene and chloroform are not required. JB-4 is excellent for small non-decalcified bone specimens, routine stains, special stains and histochemical staining.

The polymerization of JB-4 is exothermic, which is easily controlled by polymerizing on ice or by using refrigeration at 4°C. Clear casts are obtained in 90 minutes or less. It has been successfully used in enzyme histochemistry and autoradiography. (TDS #123)

#### **APPLICATIONS**

Soft tissue Decalcified bone Small decalcified bone

#### **Key Features**

- Produces samples for high resolution
- Water soluble
- Clear casts are obtained in 90 minutes or less
- Ideal for routine and special stains

For immuno procedures we recommend the Osteo-Bed Bone Embedding Kit (Cat. #17734). JB-4 is not recommended for immuno procedures as the glycol methacrylate cannot be removed from the section and may block antigen sites for most antibody reactions.

Kit Contains: 800ml Solution A, 30ml Solution B and 12g catalyst.

Cat. #: 00226 Size: 1 kit

#### **BATSON'S #17 ANATOMICAL CORROSION KIT**

For ambient temperature preparation of exact anatomical corrosion specimens by injection of liquid plastic. After hardening, tissue is corroded away by a caustic solution, yielding a durable, scientifically exact model for anatomical study. (TDS #109) **Kit Contains**: 940ml Monomer Base, 100ml Catalyst, 50ml Promoter, 10g Pigment Red, 10g Pigment Blue.

Cat. #: 07349 Size: 1 kit

#### EMBED-ITTM LOW VISCOSITY EPOXY KIT

Modification of the Spurr's formulation, Embed-It Low Viscosity Epoxy Kit can be used for embedding biological, material and mineralogical samples. The resin readily penetrates into the specimen and cures to a clear hard solid overnight at 60°C. (TDS #622) **Kit Contains**: 100mL of Solution A and 100mL of Solution B

Cat. #: 24300 Size: 1 kit (2x 100mL) • Cat. #: 24300A-1 (Solution A) - 1L) • Cat. #: 24300A-3.8 (3.8L) • Cat. #: 24300B-1 (Solution B) - 1L) • Cat. #: 24300B-3.8 (3.8L)



#### JB-4® PLUS EMBEDDING KIT

A unique polymer embedding system that gives a higher level of morphological detail than paraffin-processed tissues. Offers all the benefits of JB-4, plus additional advantages of: a cooler-acting accelerator and the production

of clear blocks. Does not require dehydration to absolute alcohol except for dense, bloody or fatty tissue specimens. Excellent for routine stains, special stains and histochemical staining. (TDS #393) **Kit Contains:** 500ml Solution A (Monomer); 15ml Solution B (Accelerator); 8g Catalyst (Benzoyl Peroxide, Plasticized)

Cat. #: 18570 Size: 1 kit • Cat. #: 18570C-8 (8g) • Cat. #: 18570B-15 (15ml) • Cat. #: 18570A-500 (500ml)

#### JB-4® MINI EMBEDDING KIT

A mini pre-measured and ready-to-use version of the JB-4 Kit. A unique polymer embedding material that gives a higher level of morphological detail than paraffin processed tissues. Water-soluble media, excellent for routine stains, special stains and histochemical staining. (TDS #494)

**Kit Contains:** 2 - 40ml Embedding Solution A, 2ml Embedding Solution B and 0.50g Benzoyl Peroxide Plasticized in small bottles.

Cat. #: 22507 Size: 1 kit



# JB-4® PLASTIC BLOCK HOLDERS

Easy to store plastic block holders for resin. Matte surface for easy marking and a large center hole to prevent bubble formation during polymerization. Block Holders fit

securely into embedding molding cavities. Attach to Polysciences' chucks designed for commonly used microtomes. (TDS #494)

Cat. #: 15899-50 Size: 1 box (50) • Cat. #: 15899-100 Size: 1 box (100)

# LOWICRYL® HM20, NON-POLAR, HYDROPHOBIC, -70° C EMBEDDING KIT

Lowicryl HM20 Kits are non-polar and used to produce high contrast images of completely unstained thin sections by Z-contrast. HM kits are particularly suitable for darkfield observation because of their relatively low density. (TDS #248) **Kit Contains:** 3x225g of monomer E, 1x130g of crosslinkers D and 1x4.8g of initiator C (Full line of kits available on website and catalog.)

Cat. #: 15924 Size: 1 kit

# MONOSTEP<sup>TM</sup> LOWICRYL® K4-M POLAR & HM20 EMBEDDING MEDIA

MonoStep Lowicryls are pre-mixed, ready to use low temperature embedding media that save time and minimize chemical contact. They are ideal for use in protocols requiring immunohistochemistry.

MonoStep Lowicryl HM20 is a non-polar, hydrophobic, embedding media that is based on our popular Lowicryl HM20 formulations for use down to -70°C. MonoStep products are especially appropriate for immunolabeling resulting in improved preservation of antigenicity and lower background labeling.

MonoStep Lowicryl K4M is a polar, hydrophilic, embedding medium based on our popular Lowicryl K4M formulations for applications requiring temperatures as low as -35°C. MonoStep products are particularly appropriate for immunolabeling resulting in better preservation of antigenicity and lower background labeling compared to other methods.

#### **APPLICATIONS**

Animal tissue
Plant tissue
Cultured cells
Microorganisms, bacteria, yeast
Tissue biopsies
Freeze-dried biological samples

#### **Key Features**

- Immediately applicable without mixing
- Improved mechanical properties

Cat. #: 23646 - K4M Size: 225g • Cat. #: 23994 - HM20 Size: 225g

#### **OSTEO-BED BONE EMBEDDING KIT**

Formulated for embedding large and small mineralized (undecalcified) bone specimens. Osteo-Bed is a methyl methacrylate-based material that can be removed from the section and allows the use of staining procedures very much like a paraffin section. Also recommended for immunohistochemistry procedures performed on trephines and other non-decalcified bone or soft tissues. Not water-soluble. **Kit Contains:** 900ml Osteo-Bed Resin Solution A, 4x500ml Osteo-Bed Solvent (Solution B), 2 x 12gm Benzoyl Peroxide Plasticized (Catalyst- Soultion C)

Cat. #: 17734 Size: 1 kit • Cat. #: 17734C-1 (12g) • Cat. #: 17734B-4 (4x500 ml) • Cat. #: 17734A-900 (900 ml)

#### **OSTEO-BED PLUS EMBEDDING KIT**

Osteo-Bed Plus Embedding Kit offers the same benefits as Osteo-Bed Bone Embedding Kit with the added benefit of producing much harder blocks for supporting undecalcified bone specimens and bone containing metal implants, grafts and stents. Suitable for use with large and small mineralized (undecalcified) bone sections and hard tissues.

#### **Features**

- Yields clear, hard blocks for cutting sections
- Ideal for large bone samples sectioned with a heavyduty microtome
- Infiltrates rapidly and produces high hardness after polymerization

Cat. #: 24889 Size: 1 kit

#### POLY/BED® 812 EMBEDDING KIT/BDMA

(GLAUERT VERSION)

This kit configuration provides even lower viscosity and faster diffusion and penetration than the standard Luft formulation. (TDS #471)

Cat. #: 21844 Size: 1 kit

### POLY/BED® 812 (LUFT FORMULATIONS) EMBEDDING KIT/ DMP-30

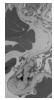
Use Poly/Bed for studies requiring beam stability, low shrinkage and good contrast. Poly/Bed Epoxy formulations are of lower viscosity than Araldite® formulations and provide better penetration into tissue samples. (TDS #233)

Cat. #: 08792 Size: 1 kit

### **POLYCUT-EASE**

Adding 1% PolyCut-Ease to any epoxy embedding recipe will enable many stress-free sections to be cut from a single area of a glass knife. Preserves the life of your diamond knife edge as it markedly reduces friction as it cuts through the plastic. This additive will not change the block color or EM image quality. (TDS #385)

Cat. #: 18615 Size: 100ml



#### Spurr Low Viscosity Embedding Kit

The low viscosity of the Spurr formulation allows rapid infiltration into tissues, minerals and other dense structures. Facilitates embedments with high lipid contents, hard membranes or highly vacuolated parenchymatous tissues. (TDS #127)

Kit Contains: 450g NSA, 250g ERL 4221, 250g D.E.R. 736, 100g DMAE

Cat. #: 01916 Size: 1 kit

# MICROTOMY / SECTIONING

#### **DELI-CAL BLOCK SOLUTION**

Our microtome soak saves time and money by allowing to you salvage problem blocks right at cutting stations. The quality and thoroughness of *Deli-Cal* Block Solution is dependent upon the original decalcification procedure and condition of the specimen.

Cat. #: 24900 Size: 250ml, 500ml

#### **HISTOHEME**

Developed to assist histologists with bloody specimens such as placental fragments, bone marrow biopsies, liver, spleen and endometrial curretings, which tend to harden after processing or dry out. Histoheme allows for long, clean paraffin ribbons. (TDS #763)

Cat. #: 24774 Size: 120 ml, 250 ml, 500 ml



#### **SOFT BLOCK**

Unique formula for softening difficult-to-cut tissue in paraffin. Effective on bone, nails and tissue. Easy to use, just soak pre-trimmed block surface and cut. Soft Block is environmentally safe, special waste disposal is not required and will not damage equipment. (TDS #718)

Cat. #: 24616 Size: 120 ml , 500 ml , 1 gal

#### **SOFT NAIL**

Unique formulation to soften keratin. Made for very hard complex keratinized hair, nail and skin samples common in Mohs Histology laboratories. Hair, nail and skin samples that have been processed tend to flex and turn becoming challenging to embed and cut. (Not a decalcification solution). (TDS #763)

Cat. #: 24775 Size: 250ml

#### **TOTAL CUTTING SOLUTION KIT**

Our Total Cutting Solution Kit provides you with five tissue cutting solutions to address decalcification issues, and difficult tissue blocks and specimens.

#### **APPLICATION**

Keratinized hair

Nails

Skin

Small and large bones

Over processed or dry specimen

Blood rich specimen (spleen, placenta, liver)

Mohs laboratories, Veterinary Histology and Podiatry Nail Histology

#### **Key Features**

- Salvage problem blocks at microtomy station
- Easy to use no mixing required

**Kit Components:** 120ml Histoheme, 120ml Soft Block, 120ml Soft Nail, 120ml Super Decalcifier I: Delicate, 120ml Super Decalcifier II: Heavy Duty, Reusable 10 multi-well block holders. Solutions are also sold separately in larger sizes.

Cat. #: 25388 Size: 1 kit



#### MICROSCOPE SLIDES, CONTROL

Slide allows control specimen and patient's specimen to be on the same slide with positive identification of both. Allows identical staining procedure to be performed

simultaneously on patient and control tissues. Slide has a frosted end for easy marking and special coating for enhanced sample adhesion to the slide.

Cat. #: 24012 Size: 1 box (72 slides)

### MICROSCOPE SLIDES,



#### **IMMUNOFLUORESCENCE**

Durable Teflon® (PTFE) coating that is acetone-resistant, autoclavable and hydrophobic. Slides are 1" x 3" (25mm x 75mm), 1mm thick and are useful for all fluorescent materials. These glass slides have 10 6mm wells and are frosted on one

end for easy labeling.

Cat. #: 18357 Size: 1 box (100 slides)

#### MICROSCOPE SLIDES, MICROPURE

Manufactured with optical quality pure glass, Micropure slides contain 47% less iron than water white slides. This allows visualization of true sample color. Slides have better hydrolytic resistance, resist leaching/clouding and feature increased wettability. Sandblasted 25mm x 75mm.

Cat. #: 22245 Size: 1 box (72 slides), 1 case (1440 slides)

#### POLYSINE® COATED MICROSCOPE SLIDES

Slides provide superior cell and tissue adhesion due to a permanent bio-adhesive material that electrostatically and chemically attracts tissues and tissue sections. These slides are particularly effective in applications involving frozen and paraffin-embedded sections, cytocentrifuge preparations and cytology smears. Not affected by chemicals, enzyme predigestion or heating. Size: 25mm x 75mm.

Cat. #: 26414 Size: 1 box (72 slides), 1 case (20 boxes)

#### MICROSCOPE SLIDES, TISSUE TACK<sup>™</sup> (+ CHARGED)

Treated with a specially formulated aminoalkylsilane, Tissue Tack slides provide a positively charged surface, which permits instant coupling of negatively charged tissue sections. The resultant bond stands up to the very aggressive solutions used in *in situ* hybridization procedures. Recommended for use with formalin-fixed, paraffin or plastic embedded sections. (TDS #578)

#### **APPLICATIONS**

In situ hybridization techniques Immunocytochemistry Routine staining Special staining IHC staining

#### **Key Features**

- White label for documenting specimen ID
- Aminoalkylsilane treated

Cat. #: 24216 Size: 1 box (72 slides), 1 case (20 boxes)

#### POLYGUARD PARAFFIN REPELLENT

Xylene-free paraffin repellent. Used to create a protective coating on surfaces exposed to paraffin and to clean adhering paraffin from laboratory countertops and equipment. PolyGuard will help keep your equipment and countertops free of residue.

#### **APPLICATIONS**

Paraffin microtome
Tissue processor
Embedding station
Paraffin dispensing tank
Floor
Benchtop

#### **Key Features**

- Xylene-free
- No scraping required
- Provides a pristine appearance

Cat. #: 21168 Size: 120ml, 1 case (6x120ml)

# **ROUTINE STAINS**

#### **EOSIN Y, 0.5% ALCOHOLIC SOLUTION, ACIDIC**

Used as a cytoplasmic counterstain with hematoxylin; contains acetic acid. Ready-to-use with any automated stainer.

Cat. #: 09859 Size: 500ml, 1000ml, 3.75L



# EOSIN Y, 1.0% ALCOHOLIC SOLUTION, NON-ACIDIC

Cytoplasmic counterstain. Used in hematoxylin and eosin staining. Contains no acetic acid. Ready-to-use with any automated stainer.

Cat. #: 17269 Size: 500ml, 1000ml



# GILL'S HEMATOXYLIN #1 FOR CYTOLOGY

Formulated for routine cytology staining.

This single strength formula optimally stains gynecological and non-gynecological specimens.

Can be used for staining filters and membranes.

General purpose nuclear stain, progressive type. Used with hematoxylin and eosin staining. (TDS #192)

Cat. #: 24242 Size: 500ml, 1000ml



# GILL'S #2, DOUBLE STRENGTH FOR HISTOLOGY & CYTOLOGY

Used when a stronger or darker nuclear stain is required for cytology or immunohistochemistry (IHC) counterstaining. Gill's #2 formulation is a double strength mixture, stains darker and

more quickly than Gill's #1. General purpose nuclear stain, progressive type. Used with hematoxylin and eosin staining. (TDS #192)

Cat. #: 24243 Size: 500ml, 1000ml



# GILL'S #3, TRIPLE STRENGTH FOR HISTOLOGY

Appropriate for routine histology staining where a darker nuclear stain is desired. This is a triple strength formula requiring shorter staining times. Formula is very stable and does not

require filtering prior to each use. General purpose nuclear stain, progressive type. Used with hematoxylin and eosin staining. (TDS #192)

Cat. #: 24244 Size: 500ml, 1000ml

# HEMATOXYLIN, C.I. 75290, CERTIFIED (NATURAL BLACK 1)

Nuclear protein stain and glycogen stain. General tissue stain for human, animal and/or VIR histology. Molecular Weight: 302.3

Cat. #: 02749 Size: 25g, 100g



# HARRIS HEMATOXYLIN, ACIDIFIED (MERCURY-FREE)

Used with hematoxylin and eosin staining. Use Harris Hematoxylin for routine histology and cytology. Results similar to those of Gill's Hematoxylin #1, #2 and #3 formulations can

be achieved by varying staining times. General-purpose nuclear stain, regressive type. (TDS #196)

Cat. #: 24245 Size: 500ml, 1000ml



#### **MAYERS HEMATOXYLIN**

Use for both cytology and histology. General purpose, progressive type nuclear stain used with hematoxylin and eosin staining. Useful as a counterstain for immunohistochemistry procedures.

Cat. #: 24821 Size: 500ml, 1L

# OG-6 & EA (GILL'S MODIFIED)

Orange-6 and EA are the two cytoplasmic counterstain solutions that are used sequentially in the Papanicolaou staining method for clinical cytology. Gill's modified OG-6 and EA are stable in solution and give predictable high quality staining results not possible with other formulations. (TDS #196)

Cat. #: 09782 (OG-6) Size: 500ml, 1000ml, 3.75L • Cat. #: 09783 (EA) Size: 500ml, 1000ml, 3.75L



#### **NEAT STAIN GRAM STAIN KIT**

Useful in staining bacteria from cultures or specimens by the differential Gram stain method. Staining characteristics are similar to traditional Wright's and Wright-Giemsa

stains. Neat Stain offers the flexibility of a three-dip staining sequence in both the stain and counterstain solution. Kit performs 150 tests. (TDS #803)

Cat. #: 25036 Size: 1 kit



#### **NEAT STAIN TRICHROME STAIN KIT**

For staining stool specimens. Based upon the Wheatley Trichrome technique which is a rapid staining procedure providing optimal results for routine examination.

Simplified method - use of a mordant prior to staining is not necessary. Kit performs 75 tests. (TDS #805)

Cat. #: 25035 Size: 1 kit



# STAINRITE® WRIGHT-GIEMSA STAIN SOLUTION

Romanowsky stain useful for blood films, parasites and bone marrow aspirates. Prepared from certified dyes. Ready-to-use solution makes the differentiation of human blood cells much

easier to identify. Based on a commonly used Azure-Eosin formula. (TDS #815)

Cat. #: 24985 Size: 1L, 10L

# STAINRITE® WRIGHT-GIEMSA STAIN PHOSPHATE BUFFER PH 6.8

This phosphate buffer yields satisfactory staining results every time when used with Wright-Giemsa stains. The buffer used in the Wright-Giemsa staining protocol must be pH 6.8 to achieve satisfactory results. (TDS #813, #815)

Cat. #: 24984 Size: 1L, 4L



#### STAINRITE® WRIGHT STAIN SOLUTION

Dual-purpose stain used for staining blood smears and bone marrow aspirates. Ready-touse solution makes the differentiation of human blood cells much easier to identify. (TDS #814)

Cat. #: 24986 Size: 1L, 4L, 20L

# STAINRITE® WRIGHT STAIN PHOSPHATE BUFFER PH 6.8

This phosphate buffer yields satisfactory staining results every time when used with the Wright staining method. The buffer used in the Wright staining protocol must be pH 6.8 to achieve satisfactory results. (TDS #814)

Cat. #: 24989 Size: 1L, 4L



# STAINRITE® MAY-GRÜNWALD STAIN SOLUTION

Classic hematology stain that produces dense coloration in the staining of peripheral blood smears and bone marrows. (TDS #813)

Cat. #: 24981 Size: 1L, 4L

#### STAINRITE® GIEMSA STAIN (FOR MAY-GRÜNWALD)

Giemsa stain (for May-Grünwald) is a classic blood film stain for peripheral blood smears and bone marrow specimens, used to visualize chromosomes, stains fungus histoplasma and identifies mast cells. (TDS #813)

Cat. #: 25038 Size: 100ml, 400ml

# STAINRITE® MAY-GRÜNWALD GIEMSA PHOSPHATE BUFFER PH 7.2

For use as a buffer in May-Grünwald, Wright Stain, Wright-Giemsa and Leishman staining procedures. (TDS #813)

Cat. #: 25032 Size: 1L, 4L

# **BLUING REAGENTS**

#### **LITHIUM BLUE**

Lithium Blue is a gentle yet rapid formulation for bluing hematoxylins in only 5 minutes. Lithium Blue is buffered at an alkalinity of pH 8.0. Our premixed and ready-to-use Lithium Blue provides crisp nuclear detail obtained with Gill's, Mayer's and Harris' Hematoxylin stains. For use in both cytology and histology.

Cat. #: 24820 Size: 1 gal, 1L

#### SCOTT'S BLUING REAGENT

Gentle bluing reagent formulation for those specimens that may be affected by more harsh agents. Our premixed and ready-to-use Scott's Bluing Reagent provides rapid bluing and crisp nuclear detail obtained with routine hematoxylin and eosin stains. For use in both cytology and histology.

Cat. #: 24605 Size: 1 gal



# **SPECIAL STAINS**



### **AFB KINYOUN KIT (COLD METHOD)**

Method of staining acid-fast microorganisms, specifically *Mycobacterium*. Similar to Ziehl-Neelson stain without heating. Kinyoun carbol-fuschsin has a greater concentration of phenol and basic fuchsin and does not require heating in

order to stain properly. Acid-fast organisms stain red, non acid-fast organisms stain blue. (TDS #747)

Cat. #: 25765 Size: 1 kit



### **AFB ZIEHL-NEELSON KIT (HOT METHOD)**

Used to identify acid-fast organisms, mainly *Mycobacteria*. Helpful in diagnosing *Mycobacterium tuberculosis* since its lipid rich cell wall makes it resistant to Gram stain. Also stains other bacteria like *Nocardia*. Acid-fast

bacilli stain bright red, non-acid fast organisms stain blue or green. (TDS #746)

Cat. #: 24669 Size: 1 kit

### **AMYLOID STAIN KIT (CONGO RED)**

Complete kit to aid in the staining of tissue for Amyloidosis. Amyloid Stain Kit used in the detection of amyloid FFPE as well as frozen tissue sections cut at 10 microns. The amyloid stains red and the nuclei stain blue. Control tissue is Alzheimer's or other known amyloidosis. (TDS #842)

Cat. #: 24614 Size: 1 kit



# DELICATE MELANIN BLEACH KIT FOR SPECIAL STAINS AND IHC

Removing melanin from tissue sections allows for positive staining to be interpreted correctly especially if DAB

is used when performing immunohistochemistry. Saves time, by removing melanin pigment prior to incubation with primary antibody. Also used in IHC. (TDS #790)

Cat. #: 24909 Size: 1 kit



#### **DIFFERENTIAL QUIK III STAIN KIT**

Differential Quik III Stain Kit is similar to the easy-to-use Differential Quik Stain Kit but with an improved staining quality. It serves as a rapid turnaround staining kit that satisfies many purposes in the cost-conscious laboratory environment.

Differential Quik III Stain Kit provides a rapid hematology staining system utilizing three prepared solutions. The essential eosin and thiazine staining solutions are manufactured using certified dyes and QC tested on human blood smears. The convenient 15 second slide dip procedure results in stained smears comparable to Wright-Giemsa protocols.

Additionally, Differential Quik III has been formulated to provide superior results when used as an andrology stain. Users will be pleased with the differentiation of immature sperm and white blood cells and the excellent resolution achieved in the staining of the head, neck and tail piece. Furthermore, the stain is very useful to pathologists for immediate interpretation of fine needle aspiration biopsies and detecting *H. pylori* microorganisms has never been easier. Staining times may be altered to vary the eosinophilic or basophilic staining as desired. (TDS #715)

#### **APPLICATIONS:**

Blood smears
Sperm
Fine needle aspirations
Frozen sections
Cytological specimens
Cyto preps
Bone marrow biopsies
Touch preps
Microorganism detection

#### **Key Features:**

- 15 second slide dip procedure
- Comparable to Wright-Giemsa results
- Quick and easy staining instructions
- Exceptional stain quality and differentiation
- Consistent and reliable result

**Kit Contains:** Differential Quik III Fixative, Differential Quik III Stain, Solution I, Differential Quik III Stain, Solution II

Cat. #: 26419 Size: 8 oz, 16 oz, 1 gal



# FUNGI-FLUOR® KIT FOR FUNGAL DETECTION

Many opportunistic fungal infections develop in immunocompromised HIV-positive patients and increasingly among the non-HIV infected immunosuppressed population. A number

of these are caused by various fungal species including *Candida, Aspergillus, Histoplasma* and *Coccidioides*.

The Fungi-Fluor Kit for Fungal Detection offers a quick fluorescent stain/counterstain procedure for various fungal organisms. The kit can be used to screen a variety of specimen types, such as sputum and skin scrapings, for fungal detection.

Fungi-Fluor Staining Solution is a 0.05% solution of high purity Cellufluor, an active ingredient of Calcofluor white fluorescent stain, in deionized water with potassium hydroxide added as a clearing agent. Fungi-Fluor Counterstaining Solution B is an aqueous solution of Evans Blue dye, which is used to reduce background fluorescence. The Fungi-Fluor Kit can be used for the rapid identification of various fungal infections in fresh or frozen clinical specimens, paraffin or glycol methacrylate embedded tissues. Typical specimens include sputum, bronchoalveolar lavage (BAL), bronchial wash and tissue biopsies. (TDS #316)

#### **APPLICATIONS**

Fresh or frozen clinical specimen
Paraffin or GMA-embedded tissues

#### **Key Features**

- Rapidly offers greater morphologic detail than PAS or silver stains
- Counterstain greatly reduces background fluorescence
- Simplicity and rapidity over immunostains
- Packaged in convenient dropper bottles
- Stains over 500 slides

FDA approved for *in vitro* diagnostics use in the United States. Product is sold in Europe under Catalog # 17442E

 $\mbox{\bf Kit Contains:}\ 75\ \mbox{ml each of Solution A and B}$ 

(US) Cat. #: 17442 Size: 1 kit

#### **FUNGI-FLUOR® PNEUMOCYSTIS KIT**



Offers a fast, fluorescent staining procedure for *Pneumocystis carinii* (*Pneumocystis jiroveci*) in bronchial specimens. Advantages include: slides are permanent and can be reactivated if fluorescence dims. Minimal prep and clean-

up, stain for 3 minutes and read. Specimen types: bronchoalveolar lavage (BAL), bronchial brush or wash, touch prep of fresh tissue, paraffin section and frozen sections. Kit performs 100 tests. (TDS #483 or #483)

Product is sold in Europe under Catalog #22363E

(US) Cat. #: 22363 Size: 1 kit



#### GOMORI'S TRICHROME STAIN KIT

For visualization of collagenous connective tissue fibers in tissue sections, primarily for distinguishing collagen from smooth muscle tissue. (TDS #389)

Cat. #: 24205 Size: 1 kit



# GROCOTT METHENAMINE SILVER STAIN (GMS) FOR FUNGUS & PCP - ROOM TEMPERATURE & MICROWAVE KIT

For the visualization of fungi and *Pneumocystis jiroveci* in tissue sections. Fungi and *P. jiroveci* are stained black, while other tissue elements

stain green. Can be used on tissue, aspirates or smears. The alkaline hexamine-silver solution allows silver ions, upon reduction to appear dark or black. (TDS #864)

Cat. #: 25087 Size: 1 kit

#### **JONES PAS-M STAIN KIT**

Improved Jones PAS-M technique. Method utilizes an enhancer to accelerate the methenamine silver reaction with the glomerular basement membranes, while reducing the time to achieve results. Used in kidney biopsies. Jones PAS-M may also be used for plastic sections for glomerular and tubular basement membranes. (TDS #868)

Cat. #: 25091 Size: 100 ml, 500ml



#### LUXOL FAST BLUE, READY TO USE

Luxol Fast Blue demonstrates myelin and also differentiates between the white and gray matter of the brain. Myelin, including phospholipids appear blue while the gray and demyelinated white matter appear colorless. (TDS #1034)

Cat. #: 24611 Size: 500ml



#### MASSON'S TRICHROME STAIN KIT

This method is used for the detection of collagen fibers in tissues such as skin, heart and muscle on formalin-fixed, paraffin-embedded sections. It may be used for frozen sections as well. Collagen fibers stain blue, nuclei stain black, and

cytoplasm, muscle, erythrocytes stained red. (TDS #872)

Cat. #: 25088 Size: 100ml, 500ml



# MULTIPLE STAIN SOLUTION

(Paragon Stain)

One step procedure with H&E quality staining. Used in Tzanck preparations of herpetic lesions and to differentiate acidophilic and basophilic structures. Stain can be directly applied to frozen

sections, epoxy or JB-4® embedded sections and utilized as a general cytoplasmic and nuclear stain. MSS also differentiates various cytologic processes, including basal cell and squamous cell carcinomas, malignant melanoma, B-cell lymphoma, acute myelomonocytic leukemia and metastatic breast cancer. Replacement for Paragon Multiple Stain (PMS). (TDS #269)

Cat. #: 08824 Size: 100ml, 500ml



#### **NEAT STAIN TRICHROME STAIN KIT**

For staining stool specimens. Based upon the Wheatley Trichrome technique which is a rapid staining procedure providing optimal results for routine examination.

Simplified method - use of a mordant prior to staining is not necessary. Kit performs 75 tests. (TDS #805)

Cat. #: 25035 Size: 1 kit



# PERIODIC ACID SCHIFF'S (PAS) STAIN KIT

Used to demonstrate polysaccharides, neutral muco-substances and basement membranes in tissue. A section of kidney is the most sensitive control. Kit is supplied with Harris Hematoxylin

Acidified as the counterstain. (TDS #602)

Cat. #: 24200 Size: 1 kit



#### **PICROSIRIUS RED STAIN KIT**

Picrosirius Red Stain binds specifically to collagen fibrils of varying diameter that is used to distinguish collagen Type I from Type III. Picrosirius Red Stain will quantify the amount of collagen in a given area of myocardial tissue.

Picrosirius Red staining is also useful in the quantitative aspect of liver fibrosis by measuring a change in collagen proportion stained as red. (TDS #797, #837)

#### **APPLICATIONS**

Paraffin embedded tissue (recommended) Frozen tissue

#### **Key Features**

- Stains fibrillar type I and type III collagen.
- Collagen = Red
- Type I = Yellow
- Type III = Green

**Kit Contains:** Solution A - Phosphomolybdic Acid (250ml or 500ml), Solution B - Picrosirius Red F3BA Stain (250ml or 500ml), Solution C - 0.1 N Hydrochloride Acid (250ml or 500ml), The 250 ml kit stains up to 100 slides; 500 ml kit stains up to 200 slides

Cat. #: 24901 Size: 250ml, 500ml



#### PRUSSIAN BLUE IRON STAIN KIT

Histochemical reaction used to demonstrate ferric iron and ferritin. This is not a true staining technique. Protein is created by the hydrochloric acid, allowing the potassium ferrocyanide to combine with the ferric iron. This forms the

ferric ferrocyanide or Prussian Blue. (TDS #601)

Cat. #: 24199 Size: 1 kit

#### **TB FLUOROSTAIN KIT**

Fluorochrome staining of mycobacteria in an acid fast smear offers several advantages over traditional carbol-fuchsin methods. Fluorescent mycobacteria stand out brightly on darkened backgrounds. Perform staining in less than 12 minutes. Uses less Auramine O and Rhodamine B, reducing costs and hazards. Kit performs 100 tests. (TDS #488)

Cat. #: 22422 Size: 1 kit

# TERRY'S POLYCHROME METHYLENE BLUE 2% AQUEOUS

Stat staining method for unfixed and fixed tissue. Stains nuclei more strongly than cell cytoplasm. Excellent dye for nuclear and nucleolar details. Can be used to demonstrate erythrocyte alterations/inclusions and some erythrocyte parasites, as well as to visualize reticulocytes. Methylene blue is different from Romanowsky stains.

Cat. #: 09978 Size: 470ml



### VERHOEFF VAN GIESON ELASTIN STAIN KIT

Useful in demonstrating atrophy of elastic tissue in cases of emphysema, thinning and loss of elastic fibers in arteriosclerosis and other vascular diseases. It can also help to identify

normal elastic tissue, such as arteries and veins; and to determine whether tumor is present in the blood vessels. (TDS #867)

Cat. #: 25089 Size: 1 kit



### VILLANUEVA OSTEOCHROME BONE STAIN

Useful for staining fresh, fixed, unembedded or plastic-embedded sections of bone. Villanueva Osteochrome Bone Stain gives uniform and reproducible results. Useful in studying biopsy or

postmortem tissue. (TDS #273)

Cat. #: 16280 Size: 450ml



# Von Kossa Method for Calcium Kit

Demonstrates only calcium phosphate and calcium carbonate salts. Used as a bone stain to indicate osteomalacia or in other paraffinembedded tissues to stain calcium deposits

seen in metabolic diseases, Paget's disease, renal osteodystrophy and hyperparathyroidism, necrotic areas associated with TB, infarction (Gandy Gamna bodies), atheroma in blood vessels and Malakoplakia in the bladder (Michaelis-Gutman bodies). Each kit will stain 500 slides. (TDS #726)

Cat. #: 24633 Size: 1 kit

#### **WEIGERT'S HEMATOXYLIN KIT (SOLUTION A & B)**

A nuclear staining solution containing hematoxylin, ferric chloride and hydrochloric acid used in many non-routine techniques (special stains) because it resists decolorization in acidic staining solutions. Ferric chloride is a strong oxidizer, so it serves both as a mordant and oxidizer for Weigert's Hematoxylin. (TDS #977)

Cat. #: 25373 Size: 250 ml

# **MOUNTING MEDIA**

### **AQUA-POLY/MOUNT**

Aqua-Poly/Mount is a water-soluble, non-fluorescing, non-permanent, aqueous mounting medium formulated for mounting sections directly from aqueous solutions. It is useful for immunofluorescent techniques as it enhances and retains fluorescent stains.

Aqua-Poly/Mount can also be used for frozen sections, fat stains and immuno-stains where aqueous mounting media is required. Aqua-Poly/Mount can be used with most fluorescent dyes and stains including DAB, Alkaline Phosphatase-Fast Red, AEC (aminoethylcarbazole) and other chromogens that are alcohol-soluble or incompatible with organic solvents.

Aqua-Poly/Mount solidifies under the coverslip after 24-48 hours at a relative humidity of 20-50%. After it dries completely it forms a solid, clear seal that facilitates handling and storage, making painting of the coverslip edges unnecessary.

Aqua-Poly/Mount can be used on automated coverslippers in place of traditional solvent based coverslipping medium. (TDS #521)

#### **APPLICATIONS**

IHC

Frozen sections
Fluorescent dyes

#### **Key Features**

- Water-soluble, non-fluorescing, non-permanent aqueous mounting medium
- Solidifies under the coverslip after 24-48 hours
- Compatible with automated coverslipper

Cat. #: 18606 Size: 20ml, 100ml, 5x20ml

#### CITRAMOUNT™ MEDIUM

Butyl acetate and acrylic mixture is the first mounting medium developed that allows coverslipping directly from d-limonene based clearance. Also compatible with xylene and Clear-Advantage xylene substitute clearant. Obtain clear seals and decreased drying times to less than 24 hours. (TDS #603) Viscosity: 90 cps Refractive Index: 1.484

Cat. #: 24214 Size: 500ml, 100ml

#### Mowiol® 4-88

High quality anti-fade medium to be used for immunofluorescence, as well as many molecular biology applications. It hardens and has the same refractive index as immersion oil. If used for immuno-fluorescence applications, the addition of glycerin is recommended. (TDS #777)

Cat. #: 17951 Size: 500g, 1kg

#### POLYGLASS COVERSLIPPING MEDIUM

Non-water soluble liquid coverslipping media designed to eliminate the use of coverslips. Non-yellowing and scratch-resistant, PolyGlass simplifies the protection of prepared slides. Refractive index is near 1.48 and can be removed if necessary by soaking in toluene or xylene. Ideal for uneven thick sections that cause air bubbles under a coverslip with routine procedures. (TDS #432) Viscosity: 149 cps.

Cat. #: 22253 Size: 120ml, 6x120ml

### POLY-MOUNT™ & POLY-MOUNT™ XYLENE

A crystal-clear xylene-based medium providing superior optical clarity and preserving most biological slides with little or no fading when stored in light tight containers. The viscosity permits bubble-free applications and excellent adhesion of coverslips. Poly-Mount is perfect for mounting and long term storage. It is non-water soluble, miscible with toluene and xylene. (TDS #432) Viscosity 192cps

#### **APPLICATIONS**

Manual coverslipping Routine staining Special staining

#### **Key Features**

- Refractive index 1.48
- Miscible with toluene and xylene
- Bubble free application

Poly-Mount Xylene (Cat. #24176) is recommended for automated coverslipping instruments that use glass coverslips.

Cat. #: 08381 Size: 120ml, 940ml • Cat. #: 24176 Size: 120ml, 940ml

# **IMMUNOHISTOCHEMISTRY**

# CITRATE BUFFER KIT, PH 6.0 FOR

ANTIGEN RETRIEVAL

Citrate based buffer solution designed to break protein cross-links, unmasking antigens and epitopes in formalin-fixed and paraffin embedded tissue sections. Solution has pH of 6.0, available in 1X and 20X, 10mM concentrations. (TDS #848, #847)

Cat. #: 25084 (1x10mM) Size: 1 kit • Cat. #: 25079 (20x10mM) Size: 1 kit

# **L.A.B. SOLUTION** (LIBERATE ANTIBODY BINDING SOLUTION)

Liberates antibody binding sites for improved IHC staining. Simply incubate for 5-20 minutes at room temperature, rinse with buffer and stain. Ready-to-use solution, no dilution, high temperature or special equipment required. Compatible with automated stainers. (TDS #630)

Cat. #: 24310 Size: 500ml

#### MELANIN BLEACH KIT

Cell detail may be obscured when a significant amount of melanin pigment is present. Melanin Bleach Kit removes the melanin, facilitating specimen analysis. Removing melanin from tissue sections allows for positive staining to be interpreted correctly, especially if DAB is used when performing immunohistochemistry. Kit also has the ability to serve as an screening factor for the presence of melanin. (TDS #781) Kit Contains: 250ml solution A and B.

Cat. #: 24883 Size: 1 kit

### TRIS BUFFERED SALINE (TBS), PH 8.0 ±0.2,

**10X CONCENTRATE** 

Buffered saline solution for use with antigen retrieval solutions. (TDS #526)

Cat. #: 24082 Size: 500ml, 1L

# TRITON® X-100

A non-ionic surfactant used for extraction of membrane bound proteins under gentle non-denaturing conditions.

Cat. #: 04605 Size: 250 g

# VISIT POLYSCIENCES.COM

For additional products & information

