# EMS BUFFERS & FIXATIVES CATALOG



Electron Microscopy Sciences EMS now offers more bulk chemical options to meet your lab's needs.
Ask us about custom chemicals and private labeling as well.



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BUFFERS
FIXATIVES
DYES AND
STAINS
ADHESIVES
RESINS
SOLVENTS
REAGENTS
FOR CLEARING/DEHYDRATING
IMMUNOGOLD
REAGENTS
ANTIFADENT
MOUNTANT
SOLUTIONS

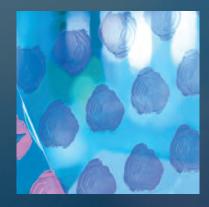
# ABOUT OUR CHEMICALS

# Everything a lab could need...

We put this catalog together specifically for labs requiring higher volumes of Buffers and Fixatives, but we carry a comprehensive range of chemicals for all fields of microscopy, histology and general laboratory research. Most are manufactured in our facility in Hatfield, PA, just outside of Philadelphia. We are fully certified and FDA registered and strictly adhere to GMP guidelines.









#### Ordering Information...

Storage conditions for each chemical is noted in the box to the left of the catalog number.

RT = Room Temperature

All chemicals must be kept away from direct sunlight.

For increased shelf life of room temperature stored chemicals, see our website for a complete line of Desiccator Cabinets.

All specific gravities, unless otherwise specified are measured at water = 1

All EMS stains are certified.

EM Grade = ACS Reagent

#### Online Resources...

See our website for a chart of uses and applications of our Dyes & Stains.

MSDS and COA are also available online.



#### CHEMICALS YOUR WAY...

Electron Microscopy Sciences offers custom and contract services, including Custom Chemical Manufacturing and Private Labeling.

See pages 2–3 for more information





P.O. Box 550 • 1560 Industry Rd. • Hatfield, PA 19440
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email: info@emsdiasum.com or stacie@ems-secure.com

# EMS BUFFERS & FIXATIVES CATALOG

**EDITION I** 

# CONTENTS

PAGE NO.

# CUSTOM & CONTRACT SERVICES .....2-3

## BUFFERS .....4-9

Acetate Buffer		 	.4
Citrate Buffer		 	.4
<b>Dulbecco's Phosphate Buffer Saline</b> -			
EARLE's Balanced Salts Solutions – E	BSS	 	.5
EDTA Buffer		 	.6
Michel's Buffer			
Michel's Transport Medium			
Millonig's Phosphate Buffer			
Phosphate Buffer, 0.1M		 	.7
Phosphate Buffer Saline (PBS)			
Sodium Cacodylate Buffer		 	.8
Sorensen's Phosphate Buffer		 	.8
Tris Buffer		 	.9
Tris (hydroxymethyl) aminomethane male	ate	 	.9

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# FIXATIVES .....10-28

Prepared Fixatives	.10
B-5 Fixative	.11
Bouin's Fixative	.11
Brasil Fixative	.11
Buffered Ethanol Fixative, 70% BE-70s	.12
Carson's Phosphate Buffered Formalin	.12
Carson's Phosphate Buffered Paraformaldehyde	.12
Davidson's Fixative	
Modified Davidson's Fixative	.12
Dietrich's Fixative	.13
Fixative/Decalcifier	
10% Formalin Solution, Low Odor	.14
10% Formalin Solution, Buffered, Low Odor	
Alcoholic Formalin 10%	.14
Formalin, Neutral, Buffered	
10% w/v in Acetate Buffer	
10% w/v in Phosphate Buffer	
Formalin Non-Buffered	.14
FORMALDEHYDE	
Formaldehyde (Formalin) Formaldehyde,	
Reagent, A.C.S.	
Formaldehyde/Zinc Fixative	.16
Formaldehyde Aqueous Solution	
(Paraformaldehyde Aqueous Solution)	40
EM Grade	
Pertusion wash and Pertusion Fixative	.17
GLUTARALDEHYDE	
Glutaraldehyde EM Grade Distillation Purified .	.18
Glutaraldehyde Biological Grade	.19
Serum Vial Glutaraldehyde	.18
Anhydrous EM Grade Glutaraldehyde	
Specially Prepared–10% Solution	.18
Glutaraldehyde, Pre-Made	
Ready-to-Use, in Buffer20	
Karnovsky's Fixative	.23
Hollande's Fixative	
McDowell Trump's Fixative	
Michel's Fixative	
Michel's Transport Medium	
Paraformaldehyde Prepared Fixatives26	
Russell's Zenker Fixative	
Trump's Fixative	.28

# **CUSTOM & CONTRACT SERVICES**

# CHEMICALS YOUR WAY

# Custom Chemical Manufacturing...

Electron Microscopy Sciences will customize chemicals to best fit your lab's unique protocols and recipes. Our lab can follow your specific formulas, or generate one to meet your needs. We manufacture chemicals right in our facility in Hatfield, PA, just outside of Philadelphia. We can customize the following products/features:

#### **Chemicals:**

- Buffers
- Fixatives
- Stains
- Adhesives
- Resins
- Solvents
- ImmunoGold Reagents

#### **Features:**

- Concentration
- Molarity
- pH
- Labeling
- Preparation Method
- QC Testing



#### Contract Services...

EMS offers a variety of services by contract.

#### 1. Formulating

From concept to product distribution, EMS can make it. We have the capabilities and expertise in the manufacturing of dermatological, hair care, skin care, beauty and bath, cosmetic, toiletry, and pharmaceutical products. We can formulate, tweak your existing product, or use one of our stock formulations to make your ideas a reality.

#### 2. Quality Assurance and Quality Control

EMS manufactures your product in our 30,000 square foot facility equipped to take on even the most demanding production schedules. We are fully certified and FDA registered and strictly adhere to GMP guidelines. We complete QC testing and release for each product, as well as stability testing to ensure your products are safe and shelf stable. All tests must be passed before the product is released and shipped. Microbiological testing is done on all final products prior to release.

#### 3. Manufacturing

Our facility is able to handle any size batch, from 1 gram to 55 gallon drums, with the highest attention to detail and quality. We can produce OTC and prescription medications, as well as any cosmetic products. Our equipment can manufacture liquids, creams, pastes, gels, sticks, solutions, and lotions in any batch size imaginable.

#### 4. Warehousing

Our warehouse is ready to package, store, and ship your products. We provide a quick turnaround so you can get your products out to customers as quickly as possible.







#### **Chemical Customization...**

At EMS, we are ready to customize your product and create the solution that is right for you. From formaldehyde to research reagents, we can customize any chemical to meet your specifications. We have the capacity to supply runs as small as 2500 units or as large as 1 million units, from 1 gram to 55 gallon drums.



## Private Labeling...

EMS offers private labeling, putting your brand at the center of your product. We can print and design labels to meet your specifications. Let us take your product to the next level with the right label.

Our facility is ready to create a custom solution for you. We can silkscreen, label, shrink-wrap, palletize, and create display case packages. With a variety of filling, capping, unscramblers, coding, and boxing equipment, any job is completed with ease and speed.



# Please contact us for more information...

Electron Microscopy Sciences

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# Our Prepared Buffers are ready to use...

All our ready-to-use buffers are:

- · Conveniently packaged.
- · Prepared fresh for each order.
- · Economical and time-saving.

#### Desired pH should be specified when ordering.

Buffers are vehicles for fixatives and require certain properties:

- **1.** Maintenance of constant pH during the time of the fixation. The pH of the fixative in EM is adjusted using the buffer system chosen; e.g. range 6.5-8.0.
- The ionic constitution to prevent the extraction of cellular components, or the deposition of precipitates of fixative chemicals



#### **Acetate** Buffer

Acetic Acid and Sodium Acetate 0.2M pH range 3.6-5.6

Cat. No.	Description	Qty.
2-8°C 11480	Acetate Buffer	225 ml
2-8°C 11482	Acetate Buffer	500 ml
2-8°C 11482-1L	Acetate Buffer	1 L

#### Acetate Buffer

	Cat. No.	Description	Qty.
2–8° C	11482-42	Acetate Buffer, 0.2M, pH 4.2	500 ml
2–8° C	11482-42-1L	Acetate Buffer, 0.2M, pH 4.2	1 L
2-8° C	11482-50	Acetate Buffer, 0.2M, pH 5.0	500 ml
2–8° C	11482-50-1L	Acetate Buffer, 0.2M, pH 5.0	1 L
2–8° C	11482-56	Acetate Buffer, 0.2M, pH 5.6	500 ml
2–8° C	11482-56-1L	Acetate Buffer, 0.2M, pH 5.6	1 L

## Citrate Buffer, 0.1M

Citric Acid and Sodium Citrate 0.1M

pH range 4.6-6.2

Cat. No	o. Description	Qty.
2-8°C 11490	Citrate Buffer	225 ml
2-8°C 11492	Citrate Buffer	500 ml
2-8°C 11492-	1L Citrate Buffer	1 L

#### Citrate Buffer, 0.2M

Citric Acid and Sodium Citrate 0.2M

Cat. No.	Description	Qty.
2-8°C 11492-04	Citrate Buffer, 0.2M, pH 4.0	1 L
2-8°C 11492-06	Citrate Buffer, 0.2M, pH 6.0	1 L

#### Citrate Buffer, pH 6.0 (10x)

**Description:** This buffer is intended for heat-induced antigen retriever on formalin-fixed paraffin-embedded (FFPE) tissue sections prior to application of antibodies. In IHC most commonly used fixative like formalin mask tissue antigens (cellular, membrane and nuclear) by cross-linking process, this results in poor or no staining in IHC. The use of this buffer on FFPE tissue section improves accessibility of antibodies to tissue antigens.

Storage: 2-8° C. DO NOT FREEZE

**Intended Use:** 1X buffer solution is intended for heat-induced antigen retriever in IHC. Please refer to primary antibody protocol.

Reagent: 10 X, pH 6 antigen retriever solution.

**Preparation of Working Solution:** Dilute this 10X buffer as needed (e.g. 90 ml of deionized or distilled water + 10 ml of this buffer), mix well, 1X buffer can be stored at  $2-8^{\circ}$ C

Cat. No.	Description	Qty.
2-8°C <b>64142-07</b>	Citrate Buffer pH 6.0	100 ml
2-8°C 64142-08	Citrate Buffer pH 6.0	1000 ml
2-8°C 64142-08-1G	Citrate Buffer pH 6.0	1 Gal.



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# **Dulbecco's Phosphate Buffer Saline** – D-PBS

All of our Dulbecco's Phosphate Buffer Saline Solutions contain: Potassium Chloride, Potassium Phosphate Monobasic, Sodium Chloride, Sodium Phosphate Dibasic, and D-Glucose. Some formulations may contain additional components. Use the table below as a quick reference for identifying the one that best suits your application. All of the solutions are prepared 1X strength.

Ingredients	F.W.	Formula I	Formula II	Formula III
KCI	74.56	Χ	X	Х
NaCl	58.44	Χ	X	Х
Na <sub>2</sub> HPO <sub>4</sub> • 7H <sub>2</sub> O	268.07	Χ	X	Х
KH <sub>2</sub> PO <sub>4</sub>	136.09	Χ	X	Х
CaCl <sub>2</sub> • <sub>2</sub> H <sub>2</sub> O	147.02	X	X	Х
MgCl <sub>2</sub> • 6H <sub>2</sub> O	203.31	Χ	X	Х
Phenol Red		_	_	0.2 g/L

Cat. No.	Description	Qty.
Formula I		
RT 11772-05	D-PBS, Formula I, 0.15M	500 ml
RT 11772-10	D-PBS, Formula I, 0.15M	1 L
T11772-10-1G	D-PBS, Formula I, 0.15M	1 Gal.
Formula II		
RT 11773-05	D-PBS, Formula II, 0.19M	500 ml
RT 11773-10	D-PBS, Formula II, 0.19M	1 L
11773-10-1G	D-PBS, Formula II, 0.19M	1 Gal.
Formula III		
RT 11774-05	D-PBS, Formula III, 0.15M	500 ml
RT 11774-10	D-PBS, Formula III, 0.15M	1 L
11774-10-1G	D-PBS, Formula III, 0.15M	1 Gal.

# **EARLE's Balanced Salts Solutions** – EBSS

All of our Earle's Balanced Salt Solution contains: Potassium Chloride, Sodium Chloride, Sodium Phosphate Monobasic, and D-glucose. Some formulations may contain additional components. Use the table below as a quick reference for identifying the one that best suits your application. All of the solutions are prepared 1X strength.

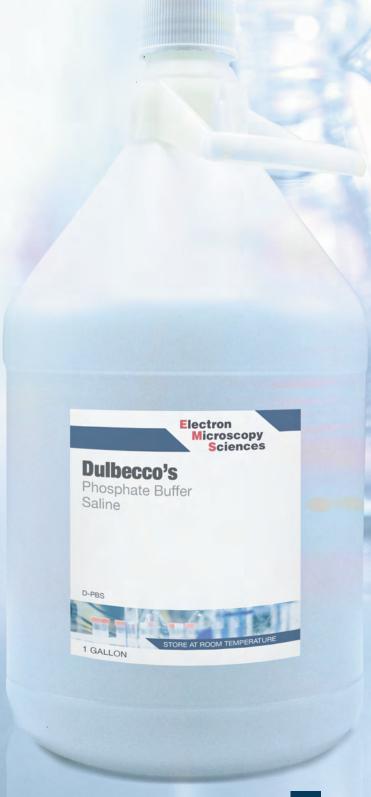
Ingredients	F.W.	Formula I	Formula II	Formula III
KCI	74.56	Χ	Х	X
NaCl.	58.44	Χ	Χ	X
NaH <sub>2</sub> PO <sub>4</sub> . H <sub>2</sub> O	137.99	Х	Χ	Х
D-Glucose	180.16	1 g/L	_	1 g/L
MgSO <sub>4</sub> • 7H <sub>2</sub> O	246.48	Χ	Χ	X
CaCl <sub>2</sub> • 2H <sub>2</sub> O	147.02	X	Χ	X
NaHCO <sub>3</sub>	84.01	X	Χ	X
Phenol Red		_	0.015 g/L	0.050 g/L

Ca	at. No.	Description	Qty.
F	ormula I		
RT 11	1765-05	ESBSS, Formula I, 0.157M	500 ml
RT <b>1</b> 1	1765-10	ESBSS, Formula I, 0.157M	1 L
RT <b>1</b> 1	1765-10-1G	ESBSS, Formula I, 0.157M	1 Gal.
F	ormula II		
RT 11	1766-05	ESBSS, Formula II, 0.152M	500 ml
RT 11	1766-10	ESBSS, Formula II, 0.152M	1 L
RT 11	1766-10-1G	ESBSS, Formula II, 0.152M	1 Gal.
F	ormula III		
RT 11	1767-05	ESBSS, Formula III, 0.157M	500 ml
RT <b>1</b> 1	1767-10	ESBSS, Formula III, 0.157M	1 L
RT 11	1767-10-1G	ESBSS, Formula III, 0.157M	1 Gal.



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**Description:** This buffer is intended for heat-induced antigen retriever on formalin-fixed paraffin-embedded (FFPE) tissue sections prior to application of antibodies. In IHC most commonly used fixative like formalin mask tissue antigens (cellular, membrane and nuclear) by cross-linking process, this results in poor or no staining in IHC. The use of this buffer on FFPE tissue section improves accessibility of antibodies to tissue antigens.

Storage: 2–8° C. DO NOT FREEZE

**Intended Use:** 1X buffer solution is intended for heat-induced antigen retriever in IHC. Please refer to primary antibody protocol.

Reagent: 10 X, pH 8.5 antigen retriever solution.

**Preparation of Working Solution:** Dilute this 10X buffer as needed (e.g. 90 ml of deionized or distilled water + 10 ml of this buffer), mix well, 1X buffer can be stored at 2-8 $^{\circ}$  C

	Cat. No.	Description	Qty.
2-8° C	64142-09	EDTA Buffer pH 8.5	100 ml
2–8° C	62142-10	EDTA Buffer pH 8.5	1000 ml
2-8° C	62142-10-1G	EDTA Buffer pH 8.5	1 Gal.

#### Michel's Buffer

Cat. No.	Description	Qty.
RT 18041-05	Michel's Buffer	500 ml
RT 18041-10	Michel's Buffer	1 L
RT 18041-10-1	G Michel's Buffer	1 Gal.
RT 18041-10-5	G Michel's Buffer	5 Gal.

#### Michel's Transport Medium

Michel's Transport Medium allows for the shipping of specimens for further immunofluorescence work. It preserves morphology and antigenicity during transport. It is not a buffer or fixative. It is simply a vehicle to transport samples. The solution must be stored at refrigerated temperatures. Do not freeze. Samples may be stored up to 5 days in this medium at room temperature.

- Comes in 250ml, 500ml, 1 Liter, Gallon, or 15ml fill in SecurTainer™
- Can be used with Michel's Buffer (washing solution)

	Cat. No.	Description	Qty.
2–8° C	18042-05	Michel's Transport Medium	250 ml
2–8° C	18042-10	Michel's Transport Medium	500 ml
2–8° C	18042-15	Michel's Transport Medium	1 L
2-8° C	18042-16	Michel's Transport Medium	1 Gal.
2–8° C	18042-17	Michel's Transport Medium,	
		15ml fill in SecurTainer™	50/cs
2–8° C	18042-16-5G	Michel's Transport Medium	5 Gal.



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## Millonig's Phosphate Buffer

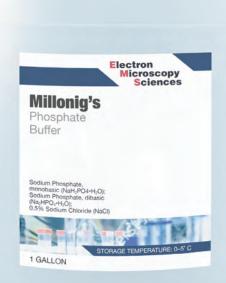
Millonig (1964); Karlsson and Schultz (1965)

**Ingredients:** Sodium Phosphate, monobasic (NaH₂PO₄•H₂O); Sodium Phosphate, dibasic (Na₂HPO₄•H₂O); 0.5% Sodium Chloride (NaCl)

**Shipping Conditions:** Ambient Temperature

The pH of this buffer is 7.4 (0.1M); the osmolarity is 440 mosmols, so this buffer is hypertonic to most body fluids. Millonig recommended to use this buffer for the fixation of very hydrated tissues with osmium tetroxide. For marine organisms, a higher concentration of sodium chloride (3%) is recommended. We supply it in a double strength (0.2M), pH 7.4. Dilution is needed before use.

	Cat. No.	Description	Qty.
2-8° C	11582-05	Millonig's Phosphate Buffer 0.2M	500 ml
2–8° C	11582-10	Millonig's Phosphate Buffer 0.2M	1 L
2–8° C	11582-10-1G	Millonig's Phosphate Buffer 0.2M	1 Gal.
2-8° C	11582-10-5G	Millonig's Phosphate Buffer 0.2M	5 Gal.





## Phosphate Buffer, 0.1M\*

Prepared from Sodium Phosphate Monobasic Hydrate and Sodium Phosphate Dibasic Heptahydrate Non-Sterile.

\* Meant for biological research only. Not to be used for medical or any other purposes.

Cat. No.	Description	Qty.
2-8°C 19340-60	Phosphate Buffer, pH 6.0	1 L
2-8°C 19340-60-1G	Phosphate Buffer, pH 6.0	1 Gal.
2-8°C 19340-65	Phosphate Buffer, pH 6.5	1 L
2-8°C 19340-65-1G	Phosphate Buffer, pH 6.5	1 Gal.
2-8°C 19340-70	Phosphate Buffer, pH 7.0	1 L
2-8°C 19340-70-1G	Phosphate Buffer, pH 7.0	1 Gal.
2-8°C 19340-72	Phosphate Buffer, pH 7.2	1 L
2-8°C 19340-72-1G	Phosphate Buffer, pH 7.2	1 Gal.

# **Phosphate Buffered Saline** (PBS)

PBS is commonly used in biochemistry. It is a salty solution containing calcium chloride, sodium phosphate and potassium phosphate. PBS is isotonic and non-toxic to cells. 1X PBS final concentration is 0.137M NaCl, 0.01M Na<sub>2</sub>HPO4, 0.0027M KCl and pH 7.4.

Cat. No.	Description	Qty.
2-8°C 19342-10	Phosphate Buffered Saline, 10X	1L
2-8°C 19242-40	Phosphate Buffered Saline, 10X	1 Gal.
2-8°C 19343-10	Phosphate Buffered Saline, 2X	1L
2-8°C 19343-40	Phosphate Buffered Saline, 2X	1 Gal.
2-8°C 19344-10	Phosphate Buffered Saline, 1X	1L
2-8°C 19344-20	Phosphate Buffered Saline, 1X	1 Gal.



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## **Sodium Cacodylate Buffer**

Prepared from Sodium Cacodylate Trihydrate (F.W. 214.02).

	Cat. No.	Description	Qty.
2-8° C	11650	Sodium Cacodylate Buffer, 0.2M, pH 7.4	225 ml
2–8° C	11652	Sodium Cacodylate Buffer, 0.2M, pH 7.4	500 ml
2-8° C	11653	Sodium Cacodylate Buffer, 0.2M, pH 7.4	1 L
2–8° C	11653-1G	Sodium Cacodylate Buffer, 0.2M, pH 7.4	1 Gal.
2–8° C	11654	Sodium Cacodylate Buffer, 0.4M, pH 7.2	500 ml
2-8° C	11655	Sodium Cacodylate Buffer, 0.4M, pH 7.2	1 L
2–8° C	11655-1G	Sodium Cacodylate Buffer, 0.4M, pH 7.2	1 Gal.

#### Sorensen's Phosphate Buffer

(Phosphate Mixed Sodium Salts)

Sorensen, see Dawson et. al, (1969)

Sodium Phosphate, dibasic (Na<sub>2</sub>HPO<sub>4</sub> • H<sub>2</sub>O)

Sodium Phosphate, monobasic (NaH<sub>2</sub>PO<sub>4</sub> • H<sub>2</sub>O)

0.2M, pH range 5.8 – 8.0

**Shipping Conditions:** Ambient Temperature **Maximum Shelf Life after Receipt:** 3 month

The osmolarity of a 0.1 M at a pH 7.2 is 226 mosmols; with the addition of 0.18 M of sucrose to the solution, the osmolarity raises to 425 mosmols. Standard pH 7.2; 0.2M is supplied. Otherwise, specify pH when ordering.

Cat. No.	Description	Qty.
2-8°C 11600-05	Sorensen's Phosphate Buffer, pH 7.2	500 ml
2-8°C 11600-10	Sorensen's Phosphate Buffer, pH 7.2	1 L
2-8°C 11600-10-4L	Sorensen's Phosphate Buffer, pH 7.2	4 L
	Sorensen's Phosphate Buffer, pH 7.2	5 Gal.
2-8°C 11600-10	Sorensen's Phosphate Buffer, 0.2M, pH 7.2	1 L
2-8°C 11600-40	Sorensen's Phosphate Buffer, 0.2M, pH 7.2	4 L
2-8°C 11600-40-5G	Sorensen's Phosphate Buffer, 0.2M, pH 7.2	5 Gal.
2-8°C 11601-10	Sorensen's Phosphate Buffer, 0.2M, pH 7.4	1 L
2-8°C 11601-40	Sorensen's Phosphate Buffer, 0.2M, pH 7.4	4 L
2-8°C 11601-40-5G	Sorensen's Phosphate Buffer, 0.2M, pH 7.4	5 Gal.
2-8°C 11682-05	Sorensen's Phosphate Buffer, 0.15M, pH 7.4	500 ml
2-8°C 11682-10	Sorensen's Phosphate Buffer, 0.15M, pH 7.4	1 L
2-8°C 11682-10-4L	Sorensen's Phosphate Buffer, 0.15M, pH 7.4	4 L
2-8°C 11682-10-5G	Sorensen's Phosphate Buffer, 0.15M, pH 7.4	5 Gal.



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## Tris Buffer, pH 10.0 (10x)

This buffer is intended for heat-induced antigen retriever on formalin-fixed paraffin-embedded (FFPE) tissue sections prior to application of antibodies. In IHC most commonly used fixative like formalin mask tissue antigens (cellular, membrane and nuclear) by cross-linking process, this results in poor or no staining in IHC. The use of this buffer on FFPE tissue section improves accessibility of antibodies to tissue antigens.

**Storage:** 2–8° C. DO NOT FREEZE

**Intended Use:** 1x buffer solution is intended for heat-induced antigen retriever in IHC. Please refer to primary antibody protocol.

Reagent: 10x, pH 10 antigen retriever solution.

**Preparation of Working Solution:** Dilute this 10x buffer as needed (e.g. 90 ml of deionized or distilled water + 10 ml of this buffer), mix well, 1x buffer can be stored at 2-8°C.

Cat. No.	Description	Qty.
2-8°C 64142-11	Tris Buffer pH 10.0	100 ml
2-8°C 64142-12	Tris Buffer pH 10.0	1000 ml
2-8°C 64142-12-1	G Tris Buffer pH 10.0	1 Gal.

#### Tris, (hydroxymethyl) aminomethane maleate

	0 ml 0 ml 1 L Gal.
2-8°C 11740 Tris Maleate Buffer 0.2M pH range 6.4-8.0 50	0 ml
	1 L
2-8°C 11740-1L Tris Maleate Buffer 0.2M pH range 6.4-8.0	
	Gal.
2-8°C <b>11740-1G</b> Tris Maleate Buffer 0.2M pH range 6.4-8.0 1	
Tris Buffer	
2-8°C <b>11730-05</b> Tris Buffer 0.2M pH 8.0 25	0 ml
2-8°C 11730-06 Tris Buffer 0.2M pH 8.0 50	0 ml
2-8°C 11730-06-1L Tris Buffer 0.2M pH 8.0	1 L
2-8°C 11730-06-1G Tris Buffer 0.2M pH 8.0 1	Gal.
Tris Buffered Saline	
2-8°C <b>11730-08</b> Tris Buffered Saline pH 7.4 25	0 ml
2-8°C 11730-09 Tris Buffered Saline pH 7.4 50	0 ml
2-8°C 11730-09-1L Tris Buffered Saline pH 7.4	1 L
2-8°C <b>11730-09-1G</b> Tris Buffered Saline pH 7.4 1	Gal.
Tris HCL Buffer	
2-8°C 11730-12 Tris HCL Buffer 1M pH range 6-8 25	0 ml
2-8°C 11730-15 Tris HCL Buffer 1M pH range 6-8 50	0 ml
2-8°C 11730-15-1L Tris HCL Buffer 1M pH range 6-8	1 L
2-8°C <b>11730-15-1G</b> Tris HCL Buffer 1M pH range 6-8	Gal.
Tris HCL Buffer	
2-8°C 11730-20 Tris HCL Buffer pH range 7.2-9.0 25	0 ml
2-8°C 11730-25 Tris HCL Buffer pH range 7.2-9.0 50	0 ml
2-8°C 11730-25-1L Tris HCL Buffer pH range 7.2-9.0	1 L
2-8°C 11730-25-1G Tris HCL Buffer pH range 7.2-9.0 1	Gal.



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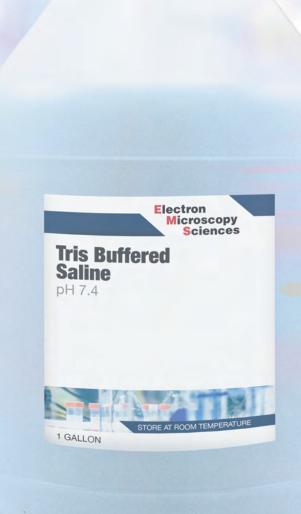


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exactly the way you want them.

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## **Prepared Fixatives**

Premixed, prebuffered fixatives, that are pH adjusted for immediate laboratory use. They are freshly prepared upon receipt of order to ensure maximum shelf life. The fixatives are filled in 20 ml glass vials (10 ml/vial). This allows for the immediate fixation of your specimens without costly and time consuming transfer associated with ampoule contained fixatives.

\*If you desire any prepared fixative that is not already listed in our catalog or you have special size and packaging requirements, please call us.

Cat. No.	Description	Qty.
2-8°C <b>15953</b>	0.2% Formaldehyde/0.1% Chromic Acid	
	in 0.1M Sodium Cacodylate Buffer, pH 7.4	10 x 10 ml
2-8°C 15953-1L	0.2% Formaldehyde/0.1% Chromic Acid	
	in 0.1M Sodium Cacodylate Buffer, pH 7.4	1 L
2-8°C 15953-1G	0.2% Formaldehyde/0.1% Chromic Acid	
	in 0.1M Sodium Cacodylate Buffer, pH 7.4	1 Gal.
2-8°C <b>15956</b>	2% Formaldehyde/0.02% Picric Acid	
	in 0.1M Sodium Phosphate Buffer, pH 7.2	10 x 10 ml
2-8°C 15956-1L	2% Formaldehyde/0.02% Picric Acid	
	in 0.1M Sodium Phosphate Buffer, pH 7.2	1 L
2-8°C 15956-1G	2% Formaldehyde/0.02% Picric Acid	
	in 0.1M Sodium Phosphate Buffer, pH 7.2	1 Gal.
2-8°C <b>15949</b>	Formaldehyde/Glutaraldehyde, 2.5% each	
	in 0.1M Sodium Cacodylate Buffer, pH 7.4	10 x 10 ml
2-8°C 15949-1L	Formaldehyde/Glutaraldehyde, 2.5% each	
	in 0.1M Sodium Cacodylate Buffer, pH 7.4	1 L
2-8°C 15949-1G	Formaldehyde/Glutaraldehyde, 2.5% each	
	in 0.1M Sodium Cacodylate Buffer, pH 7.4	1 Gal.
2-8°C <b>15950</b>	Formaldehyde/Glutaraldehyde, 3% each	
	in 0.1M Sodium Cacodylate Buffer, pH 7.4	10 x 10 ml
2-8°C 15950-1L	Formaldehyde/Glutaraldehyde, 3% each	10 X 10 IIII
10000 12	in 0.1M Sodium Cacodylate Buffer, pH 7.4	1 L
2-8°C 15950-1G	Formaldehyde/Glutaraldehyde, 3% each	
200 10000 14	in 0.1M Sodium Cacodylate Buffer, pH 7.4	1 Gal.
2-8°C 15960	2.5% Glutaraldehyde in 0.1M	ı dui.
10000	Sodium Cacodylate Buffer, pH 7.4	10 x 10 ml
2-8°C 15960-1L	2.5% Glutaraldehyde in 0.1M	10 X 10 IIII
10000 12	Sodium Cacodylate Buffer, pH 7.4	1 L
2-8°C 15960-1G	2.5% Glutaraldehyde in 0.1M	
10000 14	Sodium Cacodylate Buffer, pH 7.4	1 Gal.
2-8°C 15960-01	2% Paraformaldehyde / 2.5% Glutaraldehyde	ı dui.
	in 0.1M Sodium Cacodylate Buffer, pH 7.4	10 x 10 ml
2-8°C 15960-01-11	2% Paraformaldehyde / 2.5% Glutaraldehyde	10 X 10 IIII
	in 0.1M Sodium Cacodylate Buffer, pH 7.4	1 L
2-8°C 15960-01-1G	2% Paraformaldehyde / 2.5% Glutaraldehyde	
	in 0.1M Sodium Cacodylate Buffer, pH 7.4	1 Gal.
2-8°C <b>15970</b>	2.5% Glutaraldehyde in 0.1M	
	Millonig's Sodium Phosphate Buffer, pH 7.2	10 x 10 ml
2-8°C 15970-1L	2.5% Glutaraldehyde in 0.1M	10 % 10 1111
	Millonig's Sodium Phosphate Buffer, pH 7.2	1 L
2-8°C 15970-1G	2.5% Glutaraldehyde in 0.1M	· · · ·
10010 10	Millonig's Sodium Phosphate Buffer, pH 7.2	1 Gal.
2-8°C 15980	2.5% Glutaraldehyde in 0.1M Sorensen's	1 0011
	Sodium-Potassium Phosphate Buffer, pH 7.2	10 x 10 ml
2-8°C 15980-1L	2.5% Glutaraldehyde in 0.1M Sorensen's	10 % 10 1111
10300-1L	,	1 L
2-8°C 15000 10	Sodium-Potassium Phosphate Buffer, pH 7.2	I L
2-8°C 15980-1G	2.5% Glutaraldehyde in 0.1M Sorensen's	
	Sodium-Potassium Phosphate Buffer, pH 7.2	1 Gal.



#### **B-5** Fixative

For lymph nodes.

	Cat. No.	Description	Qty.
RT	64122-05	B-5 Fixative	500 ml
RT	64122-06	B-5 Fixative	1 L
RT	64122-10	B-5 Fixative	4 L

## **Bouin's** Fixative

A fixative that is used in light microscopy for the preservation of soft delicate structure.

	Cat. No.	Description	Qty.
RT	15990	Bouin's Fixative	10 x 10ml
RT	15990-1L	Bouin's Fixative	1 L
RT	15990-1G	Bouin's Fixative	1 Gal.
RT	15990-5G	Bouin's Fixative	5 Gal.

## **Bouin's** Solution

Bouin's solution can be used as a fixation and a staining fluid. Bouin's fixative is excellent for use on biopsy specimens of the gastrointestinal tract. Tissue from the endocrine system are well fixed and many antibodies react well with tissue fixed in Bouin's. Bouin's solution may be used as a routine fixative or a staining solution, but should not be used as a preservative for tissue. Tissue cannot be held in Bouin's solution for extended periods. The maximum fixation time in this solution should be less than 48 hours and should be transferred to alcohol. Packaged in leak-proof histo-containers, prefilled and ready-to-use.

Formulated with Picric Acid saturated aqueous solution 75%, Formalin (40% aqueous formaldehyde) 25% and Glacial Acetic acid 5% in de-ionized water

	Cat. No.	Description	Qty.
RT	15990-01	Bouin's Fluid	1 L
RT	15990-04	Bouin's Fluid	4 L
RT	15990-04-5G	Bouin's Fluid	5 Gal.
	Bouin's Flu	id in Pre-filled cuns:	

#### Bouin's Fluid in Pre-filled cups:

RT 15990-10	Bouin's Fluid	50 x 10 ml/cs
RT 15990-20	Bouin's Fluid	50 x 20 ml/cs
RT 15990-30	Bouin's Fluid	20 x 30 ml/cs

## **Brasil** Fixative

Ethanol, Picric Acid, Formalin, Acetic Acid, Glacial

This fixative is most popular when glycogen is the target. The solution is similar to Bouin's Solution (alcoholic) offering quick hardening and good staining with acid dyes.

	Cat. No.	Description		Qty.
RT	15995-10	Brasil Fixative	1	0 x 10ml
RT	15995-20	Brasil Fixative		100 ml
RT	15995-20-1L	Brasil Fixative		1 L
RT	15995-20-1G	Brasil Fixative		1 Gal.
RT	15995-20-5G	Brasil Fixative		5 Gal.



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# Your label, our label, custom volumes...

You can have your fixatives exactly the way you want them.

Please contact us for more information.



# **Buffered Ethanol** Fixative, 70% BE-70s

EMS is proud to introduce this new ready-to-use fixative designed to offer the latest preservation of structural integrity with good immunostaining results. This fixative is a phosphate buffered ethanol (BE-70) with the addition of glycerol and glacial acetic acid.

Reference: Journal of Histochemistry & Cytochemistry 2017, Vol 65(4) p. 251-252

Cat. No.	Description	Qty.
RT 15988	Buffered Ethanol Fixative, 70% BE-70s	1 L
RT 15988-1G	Buffered Ethanol Fixative, 70% BE-70s	1 Gal.

## Carson's Phosphate Buffered Formalin

Millonig's phosphate buffered formalin as modified by Carson, Martin and Lynn, by using 4% formalin in 0.1M sodium phosphate monobasic with sodium hydroxide to pH 7.2

Cat. No.	Description	Qty.
RT 15732-05	Carson's Phosphate Buffered Formalin	500 ml
RT 15732-10	Carson's Phosphate Buffered Formalin	1 L
15732-10-1G	Carson's Phosphate Buffered Formalin	1 Gal.

# Carson's Phosphate Buffered

#### Paraformaldehyde

For some tissues, the use of formalin (contains 10-15% Methanol) is not suitable, we offer the alternative formaldehyde (prepared from paraformaldehyde – contains no methanol) for your convenience.

Cat. No.	Description	Qty.
RT 15733-05	Carson's Phosphate Buffered Paraformaldehyde	500 ml
RT 15733-10	Carson's Phosphate Buffered Paraformaldehyde	1 L
RT 15733-10-1G	Carson's Phosphate Buffered Paraformaldehyde	1 Gal.

#### **Davidson's** Fixative

(Hartmann's/Davidson's Fixative)

This is rapid fixative. Results with good nuclear detail and minimal formalin pigment. Hatmann's (Davidson's) Fixative is useful for preparing tumors, bone marrow, gynecologic specimen, fatty breast, medical biopsies. Fixation of small specimen is rapid. Exposure to the fixative should be limited to 24 hours (tissue may then be transferred to neutral buffered formalin or 70% alcohol for storage).

Based on the volume of 1125 ml solution, there is 2 part Formalin (35-39%), 3 part Ethanol, 1 part Glacial Acetic acid, and 3 part of tap water.

Cat. No.	Description	Qty.
RT 64133-10	Hartmann's (Davidson's Fixative)	1 L
RT 64133-14	Hartmann's (Davidson's Fixative)	4 L

#### **Modified Davidson's Fixative**

(14% Ethyl Alcohol, Denatured, 37.5% Formalin 37-39%, 6.25% Glacial Acetic Acid, and D.I. Water)

	Cat. No.	Description	Qty.
R	<b>64133-50</b>	Modified Davidson's Fixative	1 L
R	64133-50-1G	Modified Davidson's Fixative	1 Gal.



#### **Dietrich's** Fixative

Ethanol, formalin, glacial acetic acid, distilled water

Cat. No.	Description	Qty.
TT 15958-10	Dietrich's Fixative	10 x 10ml
RT 15958-20	Dietrich's Fixative	100 ml
15958-20-1L	Dietrich's Fixative	1 L
15958-20-1G	Dietrich's Fixative	1 Gal.

## **Fixative/Decalcifier**

A solution that fixes and decalcifies in one step.

- Prevents loss of cellular structure.
- Enhances hematoxylin staining.

Cat. No.	Description	Qty.
RT 64148-01	Fixative/Decalcifier	1 L
RT 64148-06	Fixative/Decalcifier	6 x 1 L
RT 64148-06-1G	Fixative/Decalcifier	1 Gal.

Electron Microscopy Sciences

Dietrich's Fixative

Ethanol, Formalin, Glacial Acetic Acid, Distilled Water

STORE AT ROOM TEMPERATURE

1 GALLON



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#### 10% Formalin Solution,

#### Low Odor, Histology Grade

A specially formulated odor-mask which neutralizes the formalin odor without affecting subsequent tissue processing, handling, or staining. Low odor, ready-to-use 10% formalin solution. May be used as a fixative or preservative of specimens. Its shelf life is 24 months.

Cat. No.	Description	Qty.
RT 15678-01-1L	Low Odor, 10% Formalin, Histology Grade	1 L
15678-01	Low Odor, 10% Formalin, Histology Grade	4 L
RT 15678-04	Low Odor, 10% Formalin, Histology Grade	4 x 4 L

### **10% Formalin Solution, Buffered**

#### Low Odor

Low odor, prepared w/v, pH 6.9 to 7.1 at 25°C. 10% formalin in Phosphate buffer according to the A.F.I.P. Manual of Histology. This solution allows for long-term storage of tissue specimens.

Cat. No.	Description	Qty.
RT 15741-01-1L	Low-Odor 10% Formalin, Buffered	1 L
RT 15741-01	Low-Odor 10% Formalin, Buffered	4 L
RT 15741-04	Low-Odor 10% Formalin, Buffered	4 x 4 L

#### **NEW:**

#### **Alcoholic Formalin** 10%

Alcoholic formalin blend is an ideal fixative for year-round use, but with the addition of 10% alcohol it is particularly suited for laboratories in colder climates that may benefit from a solution more resistant to freezing.

Cat. No.	Description	Qty.
TT 15739-01-1L	Alcoholic Formalin, 10%	1 L
15739-01-1G	Alcoholic Formalin, 10%	1 Gal.
RT 15739-01-5G	Alcoholic Formalin, 10%	5 Gal.

## Formalin, Neutral, Buffered

10% w/v in Acetate Buffer

Buffered with Sodium Acetate in accordance with the A.F.I.P. Manual of Histology. pH 6.0 to ph 7.1 at 20°C. Filtered and ready-to-use.

Gat. No.	Description	uty.
RT 15738-01	Formalin 10% Buffered in Acetate	1 L
RT 15738-04	Formalin 10% Buffered in Acetate	4 L
RT 15738-05	Formalin 10% Buffered in Acetate	5 Gal.

#### Formalin, Neutral, Buffered

10% w/v in Phosphate Buffer

Buffered with phosphate in accordance with the A.F.I.P. Manual of Histology. pH 6.9 to 7.1 at 25°C. Filtered and ready-to-use.

Cat. No.	Description	Qty.
RT 15740	Formalin 10% Buffered in Phosphate	450 ml
T5740-01	Formalin 10% Buffered in Phosphate	1 L
T5740-04	Formalin 10% Buffered in Phosphate	4 L
RT 15740-5G	Formalin 10% Buffered in Phosphate	5 Gal.



Electron Microscopy Sciences offers custom and contract services, including Custom Chemical Manufacturing and Private Labeling.

Please contact us for more information

#### Formalin Non-Buffered

#### Formalin 1% Non-Buffered

Cat. No.	Description	Qty.
T5734-01	Formalin 1% Non-Buffered	1 L
RT 15734-04	Formalin 1% Non-Buffered	4 L
Formalin 2	2% Non-Buffered	
Cat. No.	Description	Qty.
RT 15735-01	Formalin 2% Non-Buffered	1 L
RT 15735-04	Formalin 2% Non-Buffered	4 L
Formalin 3	8% Non-Buffered	
Cat. No.	Description	Qty.
TT 15735-10	Formalin 3% Non-Buffered	1 L
RT 15735-20	Formalin 3% Non-Buffered	4 L
Formalin 4	1% Non-Buffered	
Cat. No.	Description	Qty.
T5735-30	Formalin 4% Non-Buffered	1 L
RT 15735-40	Formalin 4% Non-Buffered	4 L
Formalin 5	5% Non-Buffered	
Cat. No.	Description	Qty.
TT 15735-50	Formalin 5% Non-Buffered	1 L
TT 15735-60	Formalin 5% Non-Buffered	4 L

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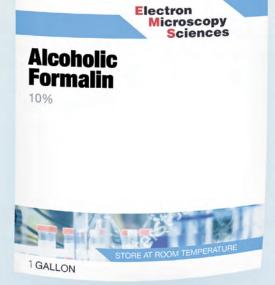


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You can have your chemicals exactly the way you want them.

Please contact us for more information.

20L/5GAL



Electron Microscopy Sciences

Formalin, Neutral, Buffered

5 GALLON

10% w/v in Phosphate Buffer

#### **Formaldehyde (Formalin)**

Formaldehyde, Reagent, A.C.S.

HCHO F.W. 30.03 CAS #50-00-0

Specific Gravity	1.09
<b>A.C.S. Specifications</b>	
Assay	35.5 to 38.0%
Residue after ignition	0.005%
Color (A.P.H.A.)	10
Sulfate (SO <sub>4</sub> )	0.002%
Heavy Metal (as Pb)	5ppm
Titrate Acid	0.006 meq/g
Chloride (CI)	5ppm
Iron (Fe)	5ppm

Ca	at. No.	Description	Qty.
RT 15	5680	Formaldehyde, Reagent, A.C.S.	450 ml
RT 15	5681	Formaldehyde, Reagent, A.C.S.	4 x 450 ml
RT 15	5682	Formaldehyde, Reagent, A.C.S.	1 qt (946 ml)
RT 15	5682-1G	Formaldehyde, Reagent, A.C.S.	1 Gal.
RT 15	5682-5G	Formaldehyde, Reagent, A.C.S.	5 Gal.

#### Formaldehyde/ Zinc Fixative

Prepared: Ready-to-use.

- Preserves fine nuclear details.
- Good for immunostaining.
- Contains no mercury.
- Can be used with automated tissue processors.
- Works well with standard and special stains because zinc is a stain enhancing mordant.



Cat. No.	Description	Qty.
RT 15675-01	Formaldehyde/Zinc Fixative	1 L
RT 15675-04	Formaldehyde/Zinc Fixative	4 L



Electron Microscopy Sciences offers custom and contract services, including Custom Chemical Manufacturing and Private Labeling.

Please contact us for more information

#### **Formaldehyde Aqueous Solution**

(Paraformaldehyde Aqueous 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. 100ml, 1 Liter, and 1 Gallon bottles available, as well as 5-Gallon Cubes.

Cat. No	. Description	Qty.
16% A	queous Solution	
RT 15700	16% Formaldehyde Aqueous Solution	10 ml
RT 15710	16% Formaldehyde Aqueous Solution	10 x 10 ml
RT 15710-	\$ 16% Formaldehyde Aqueous Solution	100 ml
RT 15711	16% Formaldehyde Aqueous Solution	10 box/lot
RT 15700-	<b>1L</b> 16% Formaldehyde Aqueous Solution	1 L
RT 15700-	<b>1G</b> 16% Formaldehyde Aqueous Solution	1 Gal.
RT 15700-	<b>5G</b> 16% Formaldehyde Aqueous Solution	5 Gal.
10% A	queous Solution	
RT 15712	10% Formaldehyde Aqueous Solution	10 x 10 ml
RT 15712-	\$ 10% Formaldehyde Aqueous Solution	100 ml
RT 15712-	1L 10% Formaldehyde Aqueous Solution	1 L
RT 15712-	1G 10% Formaldehyde Aqueous Solution	1 Gal.
RT 15712-	5G 10% Formaldehyde Aqueous Solution	5 Gal.
20% A	queous Solution	
RT 15713	20% Formaldehyde Aqueous Solution	10 x 10 ml
RT 15713-9	\$ 20% Formaldehyde Aqueous Solution	100 ml
RT 15713-	<b>1L</b> 20% Formaldehyde Aqueous Solution	1 L
RT 15713-	1G 20% Formaldehyde Aqueous Solution	1 Gal.
RT 15713-	5G 20% Formaldehyde Aqueous Solution	5 Gal.
32% A	queous Solution	
RT 15714	32% Formaldehyde Aqueous Solution	10 x 10 ml
RT 15714-	0270101111414011,44071440040	100 ml
TT 15714-	<b>1L</b> 32% Formaldehyde Aqueous Solution	1 L
RT 15714-	<b>1G</b> 32% Formaldehyde Aqueous Solution	1 Gal.
RT 15714-	<b>5G</b> 32% Formaldehyde Aqueous Solution	5 Gal.

#### **NEW: 4% and 8% Aqueous Solutions**

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. No.	Description	Qty.
4% Aqueoι	is Solution	
RT 157-4	4% Formaldehyde Aqueous Solution	10 x 10 ml
RT 157-4-100	4% Formaldehyde Aqueous Solution	100 ml
RT 157-4-1L	4% Formaldehyde Aqueous Solution	1 L
157-4-1G	4% Formaldehyde Aqueous Solution	1 Gal.
157-4-5G	4% Formaldehyde Aqueous Solution	5 Gal.
8% Aqueou	is Solution	
RT 157-8	8% Formaldehyde Aqueous Solution	10 x 10 ml
RT 157-8-100	8% Formaldehyde Aqueous Solution	100 ml
T57-8-1L	8% Formaldehyde Aqueous Solution	1 L
T57-8-1G	8% Formaldehyde Aqueous Solution	1 Gal.
157-8-5G	8% Formaldehyde Aqueous Solution	5 Gal.



# **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 available:

Group I: Perfusion Wash and Fixative, Technical Grade.

To be used for Standard stains:

Perfusion Wash (1220SK):

Phosphate Buffered Saline 01.M Phosphate Buffer pH 7.2-7.4

Perfusion Fixative (1221SK):

10% Phosphate Buffered Formaldehyde

	Cat. No.	Description	Qty.
	Group 1		
2-8°C	1220SK	Perfusion Wash, Technical	1000 ml
2-8° C	1220SK-1G	Perfusion Wash, Technical	1 Gal.
2–8°C	1220SK-5G	Perfusion Wash, Technical	5 Gal.
2-8° C	1221SK	Perfusion Fixative, Technical	1000 ml
2–8°C	1221SK-1G	Perfusion Fixative, Technical	1 Gal.
2-8° C	1221SK-5G	Perfusion Fixative, Technical	5 Gal.

#### **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

Cat. No.	Description	Qty.
Group 2		
2-8°C 1219SK	Perfusion Wash, Reagent	1000 ml
2-8°C 1219SK-1G	Perfusion Wash, Reagent	1 Gal.
2-8°C 1219SK-5G	Perfusion Wash, Reagent	5 Gal.
2-8°C <b>1224SK</b>	Perfusion Fixative, Reagent	1000 ml
2-8°C 1224SK-1G	Perfusion Fixative, Reagent	1 Gal.
2-8°C 1224SK-5G	Perfusion Fixative, Reagent	5 Gal.

#### **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% CaCl<sub>2</sub>/ Sodium Cacodylate 0.034%

#### Perfusion Fixative (1223SK):

4% Paraformaldehyde/4% Sucrose/1.4% Sodium Cacodylate

	Cat. No.	Description	Qty.
	Group 3		
2-8° C	1222SK	Perfusion Wash, Super Reagent	1000 ml
2–8° C	1222SK-1G	Perfusion Wash, Super Reagent	1 Gal.
2–8° C	1222SK-5G	Perfusion Wash, Super Reagent	5 Gal.
2-8° C	1223SK	Perfusion Fixative, Super Reagent	1000 ml
2-8°C	1223SK-1G	Perfusion Fixative, Super Reagent	1 Gal.
2-8° C	1223SK-5G	Perfusion Fixative, Super Reagent	5 Gal.



# Looking for a custom perfusion wash or fixative?

You can have your chemicals exactly the way you want them.

Please contact us for more information.



#### **Glutaraldehyde**

**EM Grade Distillation Purified** 

OCHCH₂CH₂CH2CH0 F.W. 100.12 CAS #111-30-8 Specific Gravity @ 20/20°C 1.131

- The Universal Fixative for Electron Microscopy.
- Purified to EM Grade from commercial grade by "all-glass vacuum-distillation."
- THE HIGHEST PURITY, free from polymers and other contaminants.
- Each lot is tested and assayed in our lab before we ship and guarantee its purity.
- Sealed under dry nitrogen.
- Refrigerated prior to shipment.

After glutaraldehyde has been purified to EM grade, it has a high risk of polymerizing if it is not handled properly. Electron Microscopy Sciences takes special precautions to assure a polymer-free, pure glutaraldehyde.

Every lot of our EM grade glutaraldehyde is assayed prior to shipping assuring you consistent purity and the highest possible quality. If stored properly, our Glutaraldehyde has a very long shelf life.

We package our glutaraldehyde in 10ml, single dose ampoules, sealed under dry nitrogen, and kept refrigerated until it is shipped. We offer our glutaraldehyde in a wide range of percentages to simplify mixing procedures and avoiding waste.

EM grade glutaraldehyde, stored in volumes greater than 100ml, with repeated defrosting and recapping, will polymerize in time, producing an absorption peak of 235nm rather than the 280nm of pure EM grade. The presence of polymerized glutaraldehyde greatly reduces its efficiency as a cross-linking agent, preventing proper fixation. For this reason, we provide 10ml ampoules and 100ml bottle quantities for larger applications.



Cat. No.	Description	Qty.
8% Aqueo	us Solution	
4 to (-18)°C 16000	8% Glutaraldehyde Aqueous Solution	10 ml ampoule
4tb (-18)°C 16019	8% Glutaraldehyde Aqueous Solution	Box 10 x 2 ml
4 to (-18)°C 16020	8% Glutaraldehyde Aqueous Solution	Box 10 x 10 ml
		ampoules
4tb (-18)°C 16021	same as 16020	10 bxs
4tb (-18)°C 16022	same as 16020	20 bxs
4tb (-18)°C 16010	8% Glutaraldehyde Aqueous Solution	100 ml bottle
4tb (-18)°C 16010-1L	8% Glutaraldehyde Aqueous Solution	1 L
10% Aque	ous Solution	
4to (-18)°C 16100	10% Glutaraldehyde Aqueous Solution	10 ml ampoule
4tb (-18)°C 16120	10% Glutaraldehyde Aqueous Solution	Box 10 x 10 ml
		ampoules
4 to (-18)°C 16121	same as 16120	10 bxs
4tb (-18)°C 16122	same as 16120	20 bxs
4tb (-18)°C 16110	10% Glutaraldehyde Aqueous Solution	100 ml bottle
4tb (-18)°C 16110-1L	10% Glutaraldehyde Aqueous Solution	1 L
25% Aque	ous Solution	
4 to (-18)°C 16200	25% Glutaraldehyde Aqueous Solution	10 ml ampoule
4to (-18)°C 16220	25% Glutaraldehyde Aqueous Solution	Box 10 x 10 ml
		ampoules
4 to (-18)°C 16221	same as 16220	10 bxs
4 to (-18)°C 16222	same as 16220	20 bxs
4tb (-18)°C 16210	25% Glutaraldehyde Aqueous Solution	100 ml bottle
4 to (-18)°C 16210-1L	25% Glutaraldehyde Aqueous Solution	1 L
50% Aque	ous Solution	
4tb (-18)°C 16300	50% Glutaraldehyde Aqueous Solution	10 ml ampoule
4to (-18)°C 16320	50% Glutaraldehyde Aqueous Solution	Box 10 x 10 ml
		ampoule
4tb (-18)°C 16321	same as 16320	10 bxs
4 to (-18)°C 16322	same as 16320	20 bxs
4to (-18)°C 16310	50% Glutaraldehyde Aqueous Solution	100 ml bottle
4 to (-18)°C 16310-1L	50% Glutaraldehyde Aqueous Solution	1 L
	ous Solution	
4tb (-18)°C 16350	70% Glutaraldehyde Aqueous Solution	10 ml ampoule
4tb (-18)°C 16360	70% Glutaraldehyde Aqueous Solution	box 10 x 10 ml
		ampoules
4tb (-18)°C 16365	70% Glutaraldehyde Aqueous Solution	box 10 x 2 ml
		ampoules



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#### **Glutaraldehyde**

Biological Grade

Cat. I	No.	Description	Qty.
25%	Solution	1	
4 to (-18)°C 1640	0	Glutaraldehyde, Biological Grade, 25% Solution	450 ml
4 to (-18)°C 1640°	1	Glutaraldehyde, Biological Grade, 25% Solution	4 x 450 ml
4 to (-18)°C 1641	0	Glutaraldehyde, Biological Grade, 25% Solution	1 gal.
4 to (-18)°C 1641	1	Glutaraldehyde, Biological Grade, 25% Solution	4 x 1 gal.
50%	Solution	1	
4 to (-18)°C 1650	0	Glutaraldehyde, Biological Grade, 50% Solution	450 ml
4 to (-18)°C 1650°	1	Glutaraldehyde, Biological Grade, 50% Solution	4 x 450 ml
4 to (-18)°C 1652	0	Glutaraldehyde, Biological Grade, 50% Solution	1 liter
4 to (-18)°C 1652°	1	Glutaraldehyde, Biological Grade, 50% Solution	4 x 1 liter

#### **Serum Vial Glutaraldehyde**

Many of our valued customers have requested purchasing our Glutaraldehyde in serum vials. This packaging allows the user to puncture the special non-reactive seal with a hypodermic syringe and draw out the exact quantity of Glutaraldehyde needed without opening the container. This packaging assures freshness and purity of the Glutaraldehyde at all times.

Cat. No.	Description	Qty.
25% Ac	ueous Solution	
4 to (-18)°C 16216	25% EM Grade Aqueous Glutaraldehyde	
	in Serum Vial	10 x 10 ml
4 to (-18)°C 16214	25% EM Grade Aqueous Glutaraldehyde	
	in Serum Vial	100 ml
50% Ac	ueous Solution	
4 to (-18)°C 16316	50% EM Grade Aqueous Glutaraldehyde	
	in Serum Vial	10 x 10 ml
4 to (-18)°C 16314	50% EM Grade Aqueous Glutaraldehyde	
	in Serum Vial	100 ml

<sup>\*</sup> All other concentrations are available in serum vials upon request.

# **Anhydrous EM Grade Glutaraldehyde**

Specially Prepared-10% Solution

Rapid-Freezing on a polished metal surface, at the temp. of liquid helium or liquid nitrogen, followed by freeze-substitution in osmium-acetone, has been shown to be a very useful technique for capturing rapid cellular events and for preserving cell ultrastructure.

John M. Robinson and Morris J. Karnovsky, 1991. "Rapid-freezing Cytochemistry: Preservation of Tubular Lysosomes and Enzyme Activity". J. of Histochem., Cytochem. Vol. 39, No. 6, pp 787-792

Ordering Information: please call for additional information.

Cat. No.	Description	Qty.
2-8°C <b>16530</b>	10% in Acetone	10 x 10 ml
2-8°C <b>16531</b>	10% in Ethanol	10 x 10 ml
2-8°C <b>16532</b>	10% in Methanol	10 x 10 ml
2-8°C 16533	10% in Solvent of your choice	10 v 10 ml



#### Special concentration? Special packaging requirements?

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# **Electron** Microscopy Sciences Glutaraldehyde Pre-Made Ready-to-use, in buffer Glutaraldehyde 2% in 0.1M Phosphate Buffer, pH 7.4 1 GALLON

#### **Glutaraldehyde, Pre-Made**

Ready-to-Use, in Buffer

Cat. No.	Description	Qty.
Glutaraldehy	rde 0.625% in 0.1M Phosphate Buffer, pH 7.4	
-8°C 16535-05	Glutaraldehyde 0.625% in Phosphate Buffer, pH 7.4	500 ml
-8° C 16535-10	Glutaraldehyde 0.625% in Phosphate Buffer, pH 7.4	1 L
16535-10-1G	Glutaraldehyde 0.625% in Phosphate Buffer, pH 7.4	1 Gal.
	de 2% in 0.1M Phosphate Buffer, pH 7.4	
16536-05	Glutaraldehyde 2% in Phosphate Buffer, pH 7.4	500 ml
16536-10	Glutaraldehyde 2% in Phosphate Buffer, pH 7.4	1 L
© 16536-10-1G	Glutaraldehyde 2% in Phosphate Buffer, pH 7.4	1 Gal.
Glutaraldehy	de 2% in 0.1M Sodium Cacodylate Buffer, pH 7	.4
© 16536-15	Glutaraldehyde 2% in Sodium Cacodylate Buffer, pH 7.4	500 ml
<b>16536-20</b>	Glutaraldehyde 2% in Sodium Cacodylate Buffer, pH 7.4	1 L
16536-20-1G	Glutaraldehyde 2% in Sodium Cacodylate Buffer, pH 7.4	1 Gal.
Glutaraldehy	rde 2.5% in 0.1M Phosphate Buffer, pH 7.4	
<u>16537-05</u>	Glutaraldehyde 2.5% in Phosphate Buffer, pH 7.4	500 ml
<u>16537-10</u>	Glutaraldehyde 2.5% in Phosphate Buffer, pH 7.4	1 L
☐ 16537-10-1G	Glutaraldehyde 2.5% in Phosphate Buffer, pH 7.4	1 Gal.
Glutaraldehy	de 2.5% in 0.1M Sodium Cacodylate Buffer, pH	7.4
16537-15	Glutaraldehyde 2.5% in Sodium Cacodylate Buffer, pH 7.4	
16537-20	Glutaraldehyde 2.5% in Sodium Cacodylate Buffer, pH 7.4	
16537-20-1G	Glutaraldehyde 2.5% in Sodium Cacodylate Buffer, pH 7.4	1 Gal.
Glutaraldehy	de 3% in 0.1M Phosphate Buffer, pH 7.4	
<b>16538-05</b>	Glutaraldehyde 3% in Phosphate Buffer, pH 7.4	500 ml
<u>16538-10</u>	Glutaraldehyde 3% in Phosphate Buffer, pH 7.4	1 L
© 16538-10-1G	Glutaraldehyde 3% in Phosphate Buffer, pH 7.4	1 Gal.
Glutaraldehy	rde 3% in 0.1M Sodium Cacodylate Buffer, pH 7	.4
© 16538-15	Glutaraldehyde 3% in Sodium Cacodylate Buffer, pH 7.4	500 ml
© 16538-20	Glutaraldehyde 3% in Sodium Cacodylate Buffer, pH 7.4	1 L
16535-20-1G	Glutaraldehyde 3% in Sodium Cacodylate Buffer, pH 7.4	1 Gal.
	rde 3% in Sodium Phosphate Buffer, pH 7.2	
16539-45	Glutaraldehyde 3% in Sodium Phosphate Buffer, pH 7.21	0x10 ml
16539-50	Glutaraldehyde 3% in Sodium Phosphate Buffer, pH 7.2	500 ml
16539-55	Glutaraldehyde 3% in Sodium Phosphate Buffer, pH 7.2	1 L
°C 16539-55-1G	Glutaraldehyde 3% in Sodium Phosphate Buffer, pH 7.2	1 Gal.



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#### **Glutaraldehyde, Pre-Made**

Ready-to-Use, in Buffer, continued

Cat. No.	Description	Qty.
Glutaraldehy	de 4% in 0.1m Phosphate Buffer, pH 7.3	
2-8°C 16539-60	Glutaraldehyde 4% in 0.1m Phosphate Buffer, pH 7.3	10x10 ml
2-8°C 16539-65	Glutaraldehyde 4% in 0.1m Phosphate Buffer, pH 7.3	500 ml
2-8°C 16539-70	Glutaraldehyde 4% in 0.1m Phosphate Buffer, pH 7.3	1 L
2-8°C 16539-70-1G	Glutaraldehyde 4% in 0.1m Phosphate Buffer, pH 7.3	1 Gal.
Glutaraldehy0	de 2% Paraformaldehyde 2% in Phosphate Buff Glutaraldehyde 2% Paraformaldehyde 2% in	er, pH 7.4 100ml
	Phosphate Buffer, pH 7.4	
2-8°C 16536-07	Glutaraldehyde 2% Paraformaldehyde 2% in Phosphate Buffer, pH 7.4	500ml
2-8°C <b>16536-08</b>	Glutaraldehyde 2% Paraformaldehyde 2% in Phosphate Buffer, pH 7.4	1 L
2-8°C 16536-08-1G	Glutaraldehyde 2% Paraformaldehyde 2% in	1 Gal.

#### Glutaraldehyde 2.5% Paraformaldehyde 1% in Phosphate Buffer, pH 7.4

Phosphate Buffer, pH 7.4

2-8° C	16537-06	Glutaraldehyde 2.5% Paraformaldehyde 1% in Phosphate Buffer, pH 7.4	100ml
2–8° C	16537-07	Glutaraldehyde 2.5% Paraformaldehyde 1% in	500ml
		Phosphate Buffer, pH 7.4	
2–8° C	16537-08	Glutaraldehyde 2.5% Paraformaldehyde 1% in	1 L
		Phosphate Buffer, pH 7.4	
2–8° C	16537-08-1G	Glutaraldehyde 2.5% Paraformaldehyde 1% in	1 Gal.
		Phosphate Buffer, pH 7.4	

#### Glutaraldehyde 2.5% Aqueous

2–8° C	16537-16	Glutaraldehyde 2.5% ,Aqueous	10x10ml
2–8° C	16537-17	Glutaraldehyde 2.5% Aqueous	500ml
2–8° C	16537-18	Glutaraldehyde 2.5% Aqueous	1 L
2–8° C	16537-18-1G	Glutaraldehyde 2.5% Aqueous	1 Gal.
	Glutaraldehy	de 3.0% Aqueous	
2–8° C	16537-19	Glutaraldehyde 3% Aqueous	100ml
2–8° C	16537-20-S	Glutaraldehyde 3% Aqueous	500ml
2–8° C	16537-21	Glutaraldehyde 3% Aqueous	1 L
2–8° C	16537-21-1G	Glutaraldehyde 3% Aqueous	1 Gal.



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# **Electron Microscopy** Sciences Glutaraldehyde Pre-Made Ready-to-use, in buffer Glutaraldehyde 2% in 0.1M Phosphate Buffer, PH 7.4 1 GALLON

#### Glutaraldehyde, Pre-Made

Ready-to-Use, in Buffer

Description

16538-08-1G Glutaraldehyde 3% Paraformaldehyde 3% in

Phosphate Buffer, pH 7.4

Cat. No.

Glutaralde Buffer, pH	hyde 3.0% Paraformaldehyde 3% in 0.1M F 7.4	Phosphate
2-8°C 16538-06	Glutaraldehyde 3% Paraformaldehyde 3% in Phosphate Buffer, pH 7.4	10 x 10ml
2-8°C <b>16538-07</b>	Glutaraldehyde 3% Paraformaldehyde 3% in Phosphate Buffer, pH 7.4	500 ml
2-8°C <b>16538-08</b>	Glutaraldehyde 3% Paraformaldehyde 3% in Phosphate Buffer, pH 7.4	1 L

Qty.

1 Gal.

Glutaraldehyde 4% in 0.1M in Sodium Cacodylate Buffer, pH 7.4

	,,	.,, p
2-8°C 16539-06	Glutaraldehyde 4% in 0.1M Sodium	10 x 10ml
	Cacodylate Buffer, pH 7.4	
2-8°C 16539-07	Glutaraldehyde 4% in 0.1M Sodium	500 ml
	Cacodylate Buffer, pH 7.4	
2-8°C 16539-08	Glutaraldehyde 4% in 0.1M Sodium	1 L
	Cacodylate Buffer, pH 7.4	
2-8°C 16539-08-1G	Glutaraldehyde 4% in 0.1M Sodium	1 Gal.
	Cacodylate Buffer, pH 7.4	

#### Glutaraldehyde 5.0% Aqueous

2-8°C 16539-15	Glutaraldehyde 5% Aqueous	10x10ml
2-8°C 16539-20	Glutaraldehyde 5% Aqueous	500ml
2-8°C <b>16539-25</b>	Glutaraldehyde 5% Aqueous	1 L
2-8°C 16539-25-1G	Glutaraldehyde 5% Aqueous	1 Gal.

#### Glutaraldehyde 5% in 0.1M Phosphate Buffer, pH 7.4

2-8°C 16539-30	Glutaraldehyde 5%	% in 0.1M	Phosphate	Buffer, pH 7.4	10 x 10ml
2-8°C 16539-35	Glutaraldehyde 5%	6 in 0.1M	Phosphate	Buffer, pH 7.4	500 ml
2-8°C 16539-40	Glutaraldehyde 5%	6 in 0.1M	Phosphate	Buffer, pH 7.4	1 L
2-8°C 16539-40-1G	Glutaraldehyde 5%	6 in 0.1M	Phosphate	Buffer, pH 7.4	1 Gal.



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#### Karnovsky's Fixative

#### Glutaraldehyde/Formaldehyde

This fixative contains 3% glutaraldehyde and 2% formaldehyde in 0.1M phosphate buffer, pH 7.4.

Cat. No.	Description	Qty.
	with Formalin 2% and Biological Glutarald sphate Buffer	ehyde 3%

2-8°C 15731-10	Karnovsky's Fixative Reagent Grade	1 L
2-8°C 15731-10-1G	Karnovsky's Fixative Reagent Grade	1 Gal.
2-8°C 15731-10-5G	Karnovsky's Fixative Reagent Grade	5 Gal.

This kit can be formulated to suit your requirements.

#### Please contact us for more information.

Cat. No.	Description	Qty.
Karnovsky	's with Paraformaldehyde Solution and	EM Grade
Glutaralde	hyde	
15732-10	Karnovsky's Fixative EM Grade	1 L
15732-10-1	G Karnovsky's Fivative FM Grade	1 Gal



#### Hollande's Fixative

A modification of Bouin's solution. It is stable and will decalcify small bone specimens. Tissue that is fixed with Hollande's can be stained successfully with most stains, and the cupric acetate in the solution stabilizes red blood cell membranes and cosinophil and endocrine cell granules so that less lysis occurs than with Bouin's solution. Hollande's is widely used as a fixative for biopsy specimens of the gastrointestinal tract

Thorough washing of the fixative prior to placing the specimen in a phosphate buffered formalin solution is necessary because the salts present in the solution will form an insoluble phosphate precipitate. Packaged in leak-proof histo-containers; prefilled ready-to-use.

Cat.#	Cup Size	Filled	Pack/cs
RT 64120-10	15 ml	10 ml	50/cs
RT 64120-20	30 ml	20 ml	50/cs
RT 64120-30	60 ml	30 ml	20/cs
<b>Bulk Packag</b>	ing		
RT 64120-01	Hollande's F	ixative	1 L
RT 64120-04	Hollande's F	ixative	4 L
RT 64120-01-5G	Hollande's F	ixative	5 Gal.

## McDowell Trump's Fixative

Cat. No.	Description	Qty.
RT 18030-05	McDowell Trump's Fixative	500 ml
RT 18030-10	McDowell Trump's Fixative	1 L
RT 18030-10-1G	McDowell Trump's Fixative	1 Gal.
RT 18030-10-5G	McDowell Trump's Fixative	5 Gal.



Electron Microscopy Sciences Michel's Fixative

1 GALLON



# **Michel's** Fixative, pH 7.0 – 7.4

Cat. No.	Description	Qty.
2-8°C <b>18040-05</b>	Michel's Fixative	500 ml
2-8°C 18040-10	Michel's Fixative	1 L
2-8°C 18040-20	Michel's Fixative Pre-filled	20 x 10 ml
2-8°C 18040-10-1G	Michel's Fixative	1 Gal.
2-8°C 18040-10-5G	Michel's Fixative	5 Gal.

## Michel's Transport Medium

Michel's Transport Medium allows for the shipping of specimens for further immunofluorescence work. It preserves morphology and antigenicity during transport. It is not a buffer or fixative. It is simply a vehicle to transport samples. The solution must be stored at refrigerated temperatures. Do not freeze. Samples may be stored up to 5 days in this medium at room temperature.

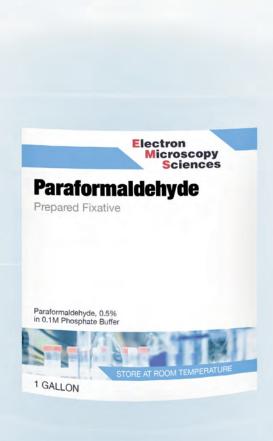
- Comes in 250ml, 500ml, 1 Liter, Gallon, 5 Gallon, or 15ml fill in SecurTainer™
- Can be used with Michel's Buffer (washing solution)

Cat. No.	Description	Qty.
2-8°C 18042-05	Michel's Transport Medium	250 ml
2-8°C 18042-10	Michel's Transport Medium	500 ml
2-8°C 18042-15	Michel's Transport Medium	1 L
2-8°C 18042-16	Michel's Transport Medium	1 Gal.
2-8°C 18042-16-5G	Michel's Transport Medium	5 Gal.
2-8°C 18042-17	Michel's Transport Medium,	
	15ml fill in SecurTainer™	50/cs





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#### **Paraformaldehyde**

Prepared Fixatives

	Cat. No.	Description	Qty.
	Paraformald	ehyde 0.5% in 0.1M Phosphate Buffer, pH 7.	4
RT	15951-10	Paraformaldehyde, 0.5% in 0.1M Phosphate Buffer	
RT	15951-15	Paraformaldehyde, 0.5% in 0.1M Phosphate Buffer	
RT		Paraformaldehyde, 0.5% in 0.1M Phosphate Buffer	1 L
RT		Paraformaldehyde, 0.5% in 0.1M Phosphate Buffer	1 Gal.
-		ehyde 1% Aqueous	
	15953-10	Paraformaldehyde, 1% Aqueous	10 x 10 ml
RT	15953-15	Paraformaldehyde, 1% Aqueous Paraformaldehyde, 1% Aqueous	500 ml
RT		Paraformaldehyde, 1% Aqueous	1 Gal.
		ehyde 1% in 0.1M Phosphate Buffer pH, 7.4	
RT	15952-10	Paraformaldehyde, 1% in 0.1M Phosphate Buffer	10 x 10 ml
	15952-10	Paraformaldehyde, 1% in 0.1M Phosphate Buffer	500 ml
RT		Paraformaldehyde, 1% in 0.1M Phosphate Buffer	1 L
RT		Paraformaldehyde, 1% in 0.1M Phosphate Buffer	1 Gal.
	Paraformald	ehyde 1% Glutaraldehyde 2%	
	in 0.1M Phos	sphate Buffer, pH 7.4	
RT	15949-30	Paraformaldehyde 1% Glutaraldehyde 2%	
		in 0.1M Phosphate Buffer	10 x 10 ml
RT	15949-35	Paraformaldehyde 1% Glutaraldehyde 2%	
DT	1	in 0.1M Phosphate Buffer	500 ml
RT	15949-35-1L	Paraformaldehyde 1% Glutaraldehyde 2% in 0.1M Phosphate Buffer	1 L
RT	15949-35-16	Paraformaldehyde 1% Glutaraldehyde 2%	
	100-10 00 10	in 0.1M Phosphate Buffer	1 Gal.
	Paraformald	ehyde 3% Glutaraldehyde 0.35%	
		ium Cacodylate, pH 7.4	
RT	15949-50	Paraformaldehyde 3% Glutaraldehyde 0.35%	
		in 0.1M Sodium Cacodylate Buffer	10 x 10 ml
RT	15949-60	Paraformaldehyde 3% Glutaraldehyde 0.35%	
		in 0.1M Sodium Cacodylate Buffer	500 ml
RT	15949-60-1L	Paraformaldehyde 3% Glutaraldehyde 0.35%	4.1
RT	150/0_60_10	in 0.1M Sodium Cacodylate Buffer Paraformaldehyde 3% Glutaraldehyde 0.35%	1 <u>L</u>
111	13345-00-10	in 0.1M Sodium Cacodylate Buffer	1 Gal.
	Daraformald		
		ehyde 4% and Glutaraldehyde 1% e Buffer, pH 7.0	
RT	115949-70	Paraformaldehyde 4% Glutaraldehyde 1%	
		in 0.1M Phosphate Buffer	10 x 10 ml
RT	15949-80	Paraformaldehyde 4% Glutaraldehyde 1%	
		in 0.1M Phosphate Buffer	500 ml
RT	15949-80-1L	Paraformaldehyde 4% Glutaraldehyde 1%	
DT	45040 00 40	in 0.1M Phosphate Buffer	1 L
RT	15949-80-1G	Paraformaldehyde 4% Glutaraldehyde 1%	1 Gal.
		in 0.1M Phosphate Buffer	ı udl.



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## **Paraformaldehyde**

Prepared Fixatives, continued

Cat. No.	Description	Qty.
Paraformald	ehyde 4% in 0.1M Sodium Cacodylate, pH7.	4
RT 15952-10S	Paraformaldehyde 4%	
	in 0.1M Sodium Cacodylate Buffer	10 x 10 ml
RT 15952-15S	Paraformaldehyde 4%	
	in 0.1M Sodium Cacodylate Buffer	500 ml
15952-15S-1L	Paraformaldehyde 4%	
	in 0.1M Sodium Cacodylate Buffer	1 L
15952-15S-1G	Paraformaldehyde 4%	
	in 0.1M Sodium Cacodylate Buffer	1 Gal.
Paraformald	ehyde 4% in 0.1M Phosphate Buffer, pH 7.4	
RT 15735-10S	Paraformaldehyde 4% in 0.1M Phosphate Buffer	10 x 10 ml
□RT 15735-20S	Paraformaldehyde 4% in 0.1M Phosphate Buffer	500 ml
RT 15735-20S-1L	Paraformaldehyde 4% in 0.1M Phosphate Buffer	1 L
TT 15735-20S-1G	Paraformaldehyde 4% in 0.1M Phosphate Buffer	1 Gal.
	ehyde 4% in 0.2M Phosphate Buffer, pH 7.4	
□ 15735-30S	Paraformaldehyde 4% in 0.2M Phosphate Buffer	10 x 10 ml
RT 15735-40S	Paraformaldehyde 4% in 0.2M Phosphate Buffer	500 ml
15735-40S-1L	Paraformaldehyde 4% in 0.2M Phosphate Buffer	1 L
	Paraformaldehyde 4% in 0.2M Phosphate Buffer	1 Gal.
	ehyde 4% in 0.1M Phosphate Buffer, pH 7.2	
_RT 15735-50S	Paraformaldehyde 4% in 0.1M Phosphate Buffer	10 x 10 ml
15735-60S	Paraformaldehyde 4% in 0.1M Phosphate Buffer	500 ml
	Paraformaldehyde 4% in 0.1M Phosphate Buffer	1 L
	Paraformaldehyde 4% in 0.1M Phosphate Buffer	1 Gal.
	ehyde 4% in 0.2M Phosphate Buffer, pH 7.2	1 dui
□ 15735-70	Paraformaldehyde 4% in 0.2M Phosphate Buffer	10 x 10 ml
15735-80	Paraformaldehyde 4% in 0.2M Phosphate Buffer	500 ml
	Paraformaldehyde 4% in 0.2M Phosphate Buffer	1 L
	Paraformaldehyde 4% in 0.2M Phosphate Buffer	1 Gal.
	ehyde 4% in 0.1M Phosphate Buffer Saline,	
15735-85	Paraformaldehyde 4% in 0.1M Phosphate Buffer	pii 7.4
_ ni 13/33-63	Saline	10 x 10 ml
RT 15735-90	Paraformaldehyde 4% in 0.1M Phosphate Buffer	
	Saline	500 ml
T5735-90-1L	Paraformaldehyde 4% in 0.1M Phosphate Buffer	
	Saline	1 L
RT 15735-90-1G	Paraformaldehyde 4% in 0.1M Phosphate Buffer	
	Saline	1 Gal.
Paraformald	ehyde 4% in 0.2M Phosphate Buffer Saline,	pH 7.4
RT 15735-95	Paraformaldehyde 4% in 0.2M Phosphate Buffer	10 x 10 ml
RT 15735-100	Paraformaldehyde 4% in 0.2M Phosphate Buffer	500 ml
RT 15735-100-1L		1 L
RT 15735-100-1G	Paraformaldehyde 4% in 0.2M Phosphate Buffer	1 Gal.

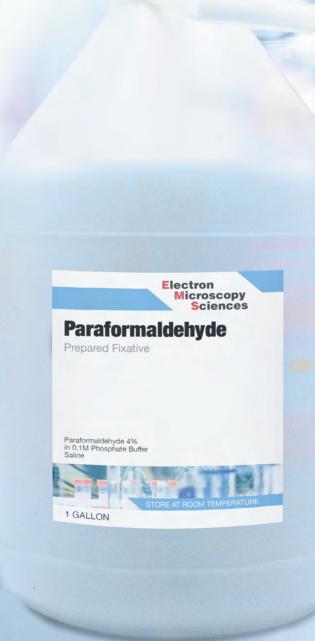


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Due to the hazardous nature of mercury, Zenker's fluid is no longer available however in place of it we are offering Russell's Zenker Fixative, which contains Zinc Chloride, and the staining results produces by this fixative are comparable to those of Zenker's Stock solution. Russell's Modified Zenker's is used in the same manner as Zenker's stock solution.

Cat. No.	Description	Qty.
RT 64123-05	Russell's Modified Zenker's Solution	500 ml
RT 64123-06	Russell's Modified Zenker's Solution	1 L
RT 64123-06-1G	Russell's Modified Zenker's Solution	1 Gal.
RT 64123-06-5G	Russell's Modified Zenker's Solution	5 Gal.

## **Trump's** Fixative

A combination of Sodium Cacodylate, Formalin, and Glutaraldehyde. Ready to use.

Cat. No.	Description	Qty.
RT 11750	Trump's Fixative	500 ml
RT 11752	Trump's Fixative	4 x 500 ml
RT 11750-1L	Trump's Fixative	1 L
11750-1G	Trump's Fixative	1 Gal.
RT 11750-5G	Trump's Fixative	5 Gal.





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