

**General Chemicals**

**Acetic Acid (Glacial)**



CH<sub>3</sub>COOH M.W. 60.05 Assay < 99.8%

**A026 1ltr**

**n, Acetyl-L-Cysteine**

Mucolytic agent used in studies of cell surface coats  
Ito, J. Cell Biol., 27, 475 (1965)  
Kelly, J. Cell Biol., 28, 51 (1966)

**A003 10g**

**Acetyl Thiocholine Iodide**

See Enzyme substrate section

**Activated Charcoal**



**C047 500g**



**Aluminium Potassium Sulphate**

M.W.474.38

**A027 1Kg**

**Ammonium Tartrate**

M.W. 184.15

**A028 100g**

**Calcium Chloride Granular**



**C036 500g**

**Celloidin**



Moistened with 35% Ethanol

**C049 100g**

**Cellosolve**



(2-Ethoxyethanol) C<sub>4</sub>H<sub>10</sub>O<sub>2</sub> M.W. 90.12

**C048 250ml**

**Chromium Trioxide EM**



Used after periodic acid oxidation and followed by silver methenamine for the detection of complex carbohydrates in cisternae of the Golgi Apparatus.  
Rambourg et al., J. Cell Biol., 40, 395 (1969)  
Also a component of chrome osmium fixatives.  
Dalton, Anat. Rec., 121, 281 (1955)



**C009 100g**

**Cupric Sulphate EM**



**C016 100g**

**Deuterium Oxide ( heavy water)**

Tilney, Devl. Biol., 2(suppl.) 63 (1968)  
Burgess & Northcote, J. Cell Sci., 5, 433 (1969)

**D006 10g**

**4,4'-Difluoro-3,3'-Dinitrodiphenylsulphone**

Bifunctional reagent used to prepare ferritin or peroxidase labelled anti-bodies for the localisation of antigens by EM.

D016 1g

**Digitonin**

$C_{56}H_{92}O_{29}$  M.W. 1229.34  
Used in aldehyde fixatives to retain cholesterol in tissues embedded for EM  
Scallen & Dietert, J. Cell Biol., 40, 802 (1969)  
Temkin R.J. Microscopy Res. & Tech., 26, 260-271 (1993)

D017 1g

**p-Dimethylaminobenzaldehyde**

$C_9H_{11}NO$  M.W. 149.2

D039 50g

**EDTA disodium salt EM**

Ethylenediamine tetraacetic Acid.  
 $Na_2C_{10}H_{14}N_2O_8 \cdot 2H_2O$  M.W. 372.20

*Used in the decalcification of tissue for EM.*

Warshawsky & Moore, J. Histochem. Cytochem., 15, 542 (1967)

*Used as an agent affecting capillary permeability.*

Clementi & Palade, J. Cell Biol., 42, 706 (1969)

*Used in the preparation of isolated liver parenchymal cells.*

Berry & Friend, J. Cell Biol., 43, 506 (1969)

*Used in selective staining method for ribonucleoproteins.*

Bernard, J. Ultrastruct. Res., 27, 250 (1969)

Monneron & Bernard, J. Ultrastruct. Res., 27, 266 (1969)

E001 100g

**D-Glucose EM**

Anhydrous

G009 500g

**Gold Chloride – Brown**

G200 1g

**Gold Chloride- Yellow**

Sodium Tetrachloroaurate. M.W. 397.80

G049 1g

**Hexamine**

(Hexamethylenetetramine) see **M006** Methenamine in EM stain section- page C26

**Hydrogen Peroxide 30% - EM**

100 volumes. M.W. 34.01



H006 100ml

**Hydroquinone**

$C_6H_6O_2$  M.W. 110.11 Assay >99%

H037 100g

**Lead Acetate EM**

See EM stain section

**Lead Nitrate EM**

See EM stain section

**Mercuric Chloride EM**

M005 100g

**Molecular Sieve Type 3A**

Type 3A molecular sieves should be used to dry dehydration solvents for electron microscopy. Most common solvents (acetone, ethanol, methanol, etc.) need to be anhydrous for electron microscopy embedding work using epoxy resins, yet they have a tendency to pick up atmospheric water when bottles are opened. It is highly recommended that all dehydrating solvent bottles are topped up after use to minimise the air volume above the liquid.

M032 Molecular sieve type 3A 500g  
M032/1 Molecular sieve type 3A 1Kg

## Paraldehyde



$C_6H_{12}O_3$  M.W. 132.16

**P037** 5 x 5ml

## Periodic Acid



ACS, Crystallised: >99.5%

**P039** 100g



## Periodic Acid 50%- EM



$H_5IO_6$  M.W. 227.96

Mowry, R.W. J. Histochem. Cytochem., 7, 288 (1959)

Ainsworth, S.K. et al., J. Histochem. Cytochem., 20, 995 (1972)

Derenzini et al., J. Histochem. Cytochem., 34, 1161 (1986)

Tsuchiya & Ogawa, J. Electr. Microsc. 22, 290 (1973)

**P005** 25ml

## Phenol



$C_6H_5OH$  M.W. 94.11

**P038** 100g

## Phosphorous Pentoxide granular



A mixture of phosphorous pentoxide and inert carrier material specially prepared for use in desiccators. The material remains free flowing after absorbing its own weight in water.

*Without indicator*

**P027** 500ml

*With indicator*

**P028** 500ml

## Picric Acid



Moistened with water ~40%.  $C_6H_3N_3O_7$  M.W. 229.11

**P036** 25g



## Potassium Chloride

KCL M.W. 74.55

**P035** 500g

## Potassium Ferricyanide EM

$K_3Fe(CN)_6 \cdot 3H_2O$  M.W. 329.25

Used in cytochemical staining procedures for the ultrastructure localisation of cholinesterase and of various dehydrogenases.

**P018** 100g

## Potassium Metabisulphite



(di-Potassium disulphite)  $K_2S_2O_5$  M.W. 222.31

**P034** 500g



Reagent for the ultrastructural localisation of sodium. M.W. 507.78

Zadunaisky, J. Cell Biol., 31, C11 (1966)

Kaye et al., J. Cell Biol., 30, 237 (1966)

Spicer et al., J. Cell Biol., 39, 216 (1968)

Lane & Martin, J. Histochem. Cytochem., 17, 102 (1969)

Tandler et al., J. Cell Biol., 45, 355 (1970)

J.Histochem. Cytochem., 24, 740 (1976)

**P017** 100g

## RDC Rapid Decalcifier



For use with human and animal calcified tissue, bone, cartilage and other hard specimens. Protects cellular structure with minimal interference with subsequent staining.

**D037** 1ltr

**Silica Gel**

Self indicating supplied as 6-20 mesh.

**S041 500g**

Self indicating coarse

**S042 500g****Silica Gel in sachets**

Small 5 gram sachets filled with free flowing self indicating grade silica gel.

**S045 100 sachets****Sodium Hydroxide - pearl**

NaOH M.W. 40.00

**S459 250g****Sodium Metaperiodate**NaIO<sub>4</sub> M.W. 213.89**S461 25g****Sodium Methoxide**CH<sub>3</sub>ONa M.W. 54.02 Assay > 95%**S465 100g****Sodium Nitrate EM****S018 500g****Sodium Sulphite**Na<sub>2</sub>SO<sub>3</sub> M.W. 126.04**S462 500g****Sodium Tetraphenyl Boron**

Used for dissociation of tissue into single cells.  
 Rappaport & Howze, Proc. Soc. Exp. Biol. Med.,  
 121, 1010 (1966)  
 Mills & Zucker-Franklin, Amer. J. Path., 54, 147  
 (1969)

**S022 1g****Sucrose EM****S025 500g****Thiocarbohydrazide EM**

See EM staining section.

**Thiosemicarbazide EM**

See EM staining section.

**Thionin**

M.W. 287.34

**T256 5g**

## Thymol



C10H14O M.W. 150.22

**T257 100g**

## Toluene-2,4-Diisocyanate



Reagent for cross-linking ferritin to antibodies.  
Singer & Schick, J. Biophys. Biochem. Cytol., 9, 519 (1961)  
Schick & Singer, J. Biol. Chem., 236, 2477 (1961)

**T012 100ml**

## Triethyl Phosphate



(C<sub>2</sub>H<sub>5</sub>O)<sub>3</sub>P(O) M.W. 182.16 Assay >99%

**T258 25g**

## Triton X-100



**T019 500g**

## Uranyl Nitrate EM



Said to prevent polymerisation damage during embedding in methacrylates. Also used as a negative stain.

This product is subject to shipping regulations and **may not** be available for overseas destinations.

Ward, J. Appl. Phys., 30, 2039 (1959)

Pease, Histological Tech. For EM 2<sup>nd</sup> ed., Academic Press, New York p105 (1964)

Valentine & Home in the Interpretation of Ultrastruc., Academic Press, New York p203 (1962)

**U004 25g**

## Surfactant & Dispersing Agents

### Decon 90™



General purpose surfactant especially suitable for biological and radioactive work. Decon 90 is biodegradable.

**C209 5ltr**

### Decon Neutracon



A near neutral cleaning concentrate. A phosphate free biodegradable neutral laboratory equipment cleaner, ideal for cleaning alkali sensitive materials such as aluminium

**C215 5ltr**

### RBS25



Surfactant and cleaning agent.

**R005 5Kg**  
**R006 1Kg**

### RBS50



A non foaming surfactant and cleaning agent.

**R012 1Kg**

### Tween™ 80

Polyoxyethylene sorbitanmonooleate

**T260 100ml**