

BUFFERS

Borax



(Sodium tetraborate) $\text{Na}_2\text{B}_4\text{O}_7 \cdot 10\text{H}_2\text{O}$. Purity 99.9%
 . M.W. 381.37

B021 500g

Boric Acid



H_3BO_3 M.W. 61.83 Purity >99.5%
 Used in silver methenamine buffer and as a component in Tris EDTA borate buffer.

B038 500g

Buffer Solution Concentrates



To make 5 litres of solution

Acetate pH 5.2

B410 1

Sorenson's pH 6.4

B411 1

Sorenson's pH 6.8

B412 1

Sorenson's pH 7.0

B413 1

Sorenson's pH 7.2

B414 1

Tris-HCl pH 7.2

B415 1

Tris-HCl saline

B416 1

For pH buffer solutions -
 see Specimen Preparation Section Page 5.16

Citric Acid EM



$\text{C}_6\text{H}_8\text{O}_7$ M.W. 192.13 Purity >99.7%

C021 500g

s-Collidine EM



(2,4,6-Collidine. 2,4,6-Trimethylpyridine). M.W. 121.18
 Prepared by the method of Bennet & Luft and recommended as a buffer for osmium fixatives.

C012 100ml

C013 25ml

s-Collidine buffer kit



When used with Osmium Tetroxide provides excellent fixation, high stability and buffering capacity. The pH can be adjusted by varying the amount of hydrochloric acid in the final volume of 200ml.

Consists of: 5 x 5.34ml s-Collidine EM

5 x 9.00ml 2.0N HCl

this makes 5 x 200ml of buffer pH7.4 – 7.7

C027 kit

Hepes

(N-2-Hydroxyethylpiperazine-N'-Ethanesulphonic acid). M.W. 238.31

H001 25g

H002 10g

Hydrochloric Acid 0.1N



Used to adjust the pH of buffers and fixative solutions.

H038 100ml

Hydrochloric Acid 1.0N



Used to adjust the pH of buffers and fixative solutions.

H039 100ml

n-Ethylmorpholine



Purity > 99.5%

E016 250g

Maleic Acid EM



Purity >99.5% M.W. 116.08

M002 500g

M003 100g

Pipes

(Piperazine-1,4-bis (2-ethanesulfonic acid) M.W. 302.37

P032 25g

Pipes Buffer Solution 0.3M

Aqueous PIPES solution adjusted by 0.1N Sodium Chloride to pH 5.5-6.0

P033 500ml

Potassium Phosphate – Monobasic

(Potassium dihydrogen orthophosphate), KH_2PO_4
M.W. 136.09

P024 500g

Potassium Phosphate – Dibasic

(Di-potassium hydrogen orthophosphate). Purity >99%

P025 500g

Sodium Acetate, Trihydrate EM



Purity >99%. M.W. 136.08

S027 500g

Sodium Cacodylate EM



(Sodium dimethyl arsenate)(Cacodylic acid).

M.W. 214.02 $\text{C}_2\text{H}_6\text{AsNaO}_2 \cdot 3\text{H}_2\text{O}$

Sabatini, et al., J. Cell Biol., 17, 19 (1963)

S030 1Kg

S006 500g

S007 250g

S008 100g

S009 25g

Sodium Carbonate Anhydrous



Na_2CO_3 M.W. 105.99

S466 500g

Sodium Citrate EM (tri-sodium citrate)

Purity > 99% minimum. M.W. 294.11

S010 500g

S011 100g

Sodium Hydrogen Carbonate EM

(Sodium bicarbonate), Purity 99.8% minimum,

M.W. 84.01

S028 500g

Sodium Phosphate, Dibasic

(Di-sodium hydrogen orthophosphate), Na_2HPO_4 ,

M.W. 358.14

S029 500g

BUFFERS contin-**Sodium Phosphate, Monobasic**

(Sodium dihydrogen orthophosphate), $\text{NaH}_2\text{PO}_4 \cdot \text{H}_2\text{O}$
M.W. 156.01

S043 **500g**

Tri-Sodium Orthophosphate

Purity > 98%. M.W. 380.12

S044 **500g**

Tannic Acid EM

(Gallotannin). $\text{C}_{76}\text{H}_{52}\text{O}_{46}$ M.W. 1701.23

T046 **100g**

Tris Buffer EM

(Tris (hydroxymethyl) aminomethane) $\text{C}_4\text{H}_{11}\text{NO}_3$
M.W. 121.14. Fine white crystals. May be used with
metal-sensitive enzyme systems. Total heavy-metal
content 2ppm maximum.

T013 **500g**

T014 **250g**

T015 **100g**

Tris-Maleate

(Tris (hydroxymethyl) aminomethane) $\text{C}_4\text{H}_{11}\text{NO}_3 \cdot \text{C}_4\text{H}_4\text{O}_4$
M.W. 237.21

T016 **100g**

T017 **25g**

Veronal Sodium

(Barbitone sodium). $\text{C}_8\text{H}_{11}\text{O}_3\text{N}_2\text{Na}$ M.W. 206.18
A drug license is required for this product

V005 **1Kg**

V002 **500g**

V003 **250g**

V004 **100g**