

Buffered formalin 10%**Intended use**

Buffered Formalin 10% is recommended as routine fixative for fixing cytological or histological specimens.

Summary

Formaldehyde is both a non-coagulant and an additive fixative. Formalin fixation is thought to form cross links between the aldehydes and the proteins, creating a gel, thus retaining cellular constituents in their in vivo relationship. Once properly fixed, the tissue should be able to withstand the subsequent stages of tissue processing or staining.

Principle

Formaldehyde is known to penetrate tissue quickly, but the fixation process may take a long time to form the various cross links with tissue proteins. Although there is no true universal fixative, 10% Buffered Formalin is perhaps the most commonly used fixative throughout the world for light microscopy and is a somewhat forgiving fixative. Of the dozens and dozens of available fixatives, it is hard to imagine a fixative more commonly used than 10% Buffered Formalin. 10% Buffered Formalin is well suited for large throughput laboratories, and requires a relatively short period of fixation, but can also be used for the long-term storage of tissue.

Reagents / Contents

Formaldehyde	100 mL
Di Sodium hydrogen phosphate	4.0 g
Sodium dihydrogen phosphate	6.5 g
Distilled or deionized water	900 mL

Appearance: Colourless solution.

Storage and stability

All reagents are stable at room temperature until the expiry date stated on each label.

Materials required but not provided

Clean grease-free glass slide, staining rack, blotting paper, immersion oil (Cat. No. 207090110025), and microscope.

Type of Specimen

Cytological and Histological samples.

Procedure

1. Prepare blood film on grease free clean slide and air dry for 2 hours at room temperature.
2. Fix the air-dried blood film with Buffered Formalin 10% for 1- 3 minutes or as desired.
3. Rinse with running tap water for 10 seconds.
4. Stain as per desired protocol.

Interpretation of Results

Cell Specimen are fixed using fixative and specific staining of fixed specimen is carried out. The stained slide is observed under microscope. Cell specimens are fixed and preserved.

Limitations / Precautions

If fixative is used in excess quantity, it may cause shrinkage and hardening of tissue.
Some fixative may have potential biohazards, handle with proper safety lab ware only.

Warranty

This product is designed to perform as described on the label and pack insert. The manufacturer disclaims any implied warranty of use and sale for any other purpose.

Reference

- 1.Isenberg, H.D. Clinical Microbiology Procedures Handbook. 2nd Edition.
- 2.Jorgensen,J.H., Pfaller , M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.
- 3.Data on file: Microxpress®, A Division of Tulip Diagnostics (P) Ltd.

Product Presentation

Cat No.	Product	Pack Size
207020610500	Buffered Formalin 10%	500 mL
207020615000		5000 mL

Disclaimer

Information provided is based on our inhouse technical data on file, it is recommended that user should validate at his end for suitable use of the product.
