

# BIOFORM S

**IVD** *In vitro* diagnostic medical device



## Modified Schaeffer buffered fixative solution of formaldehyde in methanol

**Synonym: Schäffer's fixative**

### INSTRUCTIONS FOR USE

**REF** Product code: BIOS-OT-1L (1000 ml)

BIOS-OT-5L (5000 ml)

#### Introduction

Histology, cytology and other related scientific disciplines study the microscopic anatomy of tissues and cells. Quality sample processing (and quality fixation above all) should be carried out in order to achieve good tissue and cellular structures visualization. Tissue samples must be immersed in an optimally chosen fixative immediately after sampling, because a timely fixation will prevent autolysis, putrefaction and other unwanted cellular changes. BioForm S is a buffered solution of formaldehyde and methanol. It is an ideal choice for fixing samples of lung epithelial tissue and alveolar cells. It is possible to stain the structures after fixating with BioForm S. It is used as a part of the fixative for bone tissue samples.

#### Product description

- **BIOFORM S** – Fixating solution with an ideal ratio of methanol and formaldehyde.

#### Other sections and reagents that may be used with the procedure:

- Dehydrating/rehydrating agent, such as BioGnost's alcohol solutions: Histanol 70, Histanol 80, Histanol 95 and Histanol 100
- Clearing agents, such as BioClear xylene or a substitute, such as BioClear New agent on the aliphatic hydrocarbons basis
- Infiltration and fitting agent, such as BioGnost's granulated paraffin BioWax Plus, BioWax 56/68, BioWax Blue, BioWax Micro.
- High-quality glass slides for use in histopathology and cytology, such as VitroGnost SUPER GRADE, VitroGnost COLOR or one of more than 30 models of BioGnost's VitroGnost glass slides

#### Preparing histological sections for staining

- Fixate the sample using BioForm S, dehydrate through series of ascending alcohol solutions (Histanol 70, Histanol 80, Histanol 95 and Histanol 100)  
NOTE - if a white fluffy precipitate appears in the BioForm S product, it does not affect the quality of the product
- Clear the sample with intermedium; in xylene (BioClear) or in a xylene substitute (BioClear New)
- Infiltrate and fit the sample in paraffin (BioWax Plus, BioWax 56/58, BioWax Blue, BioWax Micro)
- Cut the paraffin block to 4-6  $\mu\text{m}$  slices and place them on a VitroGnost glass slide

Use the prepared section according to individual laboratory needs and section processing methods.

#### Preparing the sample and diagnostics

Use only appropriate instruments for collecting and preparing the samples. Process the samples with modern technology and mark them clearly. Follow the manufacturer's instructions for handling. In order to avoid mistakes, the staining procedure and diagnostics should only be conducted by authorized and qualified personnel. Use only microscope according to standards of the medical diagnostic laboratory.

#### Safety at work and environmental protection

Handle the product in accordance with safety at work and environmental protection guidelines. Used solutions and out of date solutions should be disposed of as special waste in accordance with national guidelines. Chemicals used in this procedure could pose danger to human health. Tested tissue specimens are potentially infectious. Necessary safety measures for protecting human health should be taken in accordance with good laboratory practice. Act in accordance with signs and warnings notices printed on the product's label, as well as in BioGnost's material safety data sheet.

#### Storing, stability and expiry date

Keep BioForm S solution in a tightly closed original package at temperature between +15°C and +25°C. Do not keep in cold places, do not freeze and avoid exposing to direct sunlight. Date of manufacture and expiry date are printed on the product's label.

#### References

1. Hannouche, D. i sur. (2006): Embedding of bone samples in methylmethacrylate: a suitable method for tracking lacZ mesenchymal stem cells in skeletal tissues, DOI: 10.1369/jhc.6A7063.2006
2. Kasper, M. and associates (1994): Colocalization of cytokeratin 18 and villin in type III alveolar cells (brush cells) of the rat lung, *Histochemistry*, 101, pp 57-62
3. Schäffer, J. (1918): Veränderung der Gewebselementen durch einseitige Wirkung der Fixierungsflüssigkeit und Allgemeines über Fixierung, *Anat. Anz*, 51, p 353-398

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	Refer to the supplied documentation		Storage temperature range		Number of tests in package	<b>REF</b>	Product code		European Conformity
	Refer to supplied instructions		Keep away from heat and sunlight		Valid until	<b>LOT</b>	Lot number		Manufacturer
<b>IVD</b>	For <i>in vitro</i> diagnostic use only		Keep in dry place		Caution - fragile				

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