

Product Information

Zinc Formalin Fixative

Catalog Number **Z2902**
Store at Room Temperature

Synonym: ZFF

Product Description

Zinc Formalin Fixative (ZFF) provides excellent morphological preservation of nuclear and cytoplasmic tissue components. Zinc Formalin Fixative can replace the commonly used 10% neutral buffered formalin solution for routine tissue and immunohistochemical procedures. This fixative is compatible with histochemical, immunochemical, and special stains. It may be used with automated tissue processors.

The zinc chloride component of the formulation increases the rigidity of cellular components to withstand subsequent processing, sectioning, and staining procedures. Tissue specimens initially fixed using 10% neutral buffered formalin solution may be post-fixed using the Zinc Formalin Fixative.

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Preparation Instructions

The Zinc Formalin Fixative is supplied ready-to-use.

Storage/Stability

Store the product at room temperature. **Do not freeze.**

Procedure

Complete fixation can be accomplished in 4–6 hours, instead of the 12 hours or more required with formalin (see Table 1). For manual fixation procedures, exposure time can be reduced by 50%.

Table 1.

Recommended Procedure for Automatic Tissue Processing

Station	Processing Time	Solution/ Reagent	Temp.	Vacuum
1	Hold	ZFF	23 °C	No
2	60 minutes	ZFF	23 °C	Yes
3	30 minutes	70% Alcohol	23 °C	No
4	30 minutes	80% Alcohol	23 °C	No
5	30 minutes	95% Alcohol	23 °C	No
6	30 minutes	95% Alcohol	23 °C	No
7	60 minutes	100% Alcohol	23 °C	No
8	60 minutes	100% Alcohol	23 °C	No
9	60 minutes	Xylene	23 °C	No
10	60 minutes	Xylene	23 °C	No
11	30 minutes	Paraffin	58 °C	Yes
12	60 minutes	Paraffin	58 °C	Yes
13	90 minutes	Paraffin	58 °C	Yes

After fixing, tissues may be stored in the Zinc Formalin Fixative for one week without any effect. For longer storage, store fixed tissues in 10% neutral buffered formalin solution.

To prevent scale build up on the retort walls and processor tubing, it is recommended to flush systems weekly with a weak acid solution (1% acetic acid or 0.1% hydrochloric acid) followed by a hot water wash.¹

References

- Lynn, J.A. et al., Zinc isopropyl alcoholic unbuffered formalin as a postfixative for routine surgical pathology specimens. *J. Histotech.*, **17(2)**, 105-9 (1994).
- Herman, G.E. et al., Zinc formalin fixative for automated tissue processing. *J. Histotech.*, **11(2)**, 85-89 (1988).
- L'Hoste, R.J. et al., Using zinc formalin as a routine fixative in the histology laboratory. *Lab. Med.*, **26(3)**, 210-4 (1995).

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