

## Bouin's Fixative

Bouin's Fixative is used for its ability to preserve certain tissues and its compatibility with trichrome stains. In particular, Bouin's Fixative is excellent for its preservation of nuclei and chromosomes. Bouin's Fixative is composed of the following constituents; buffered formaldehyde, acetic acid, and picric acid. This solution is generally considered to be hazardous. Specifically, picric acid and formaldehyde are the most dangerous components of Bouin's Fixative.

Picric acid is highly explosive when dry. It must remain wet with a layer of liquid on it at all times. Do not mix picric acid or any solutions containing picric acid with strong oxidizers, strong alkalies, acids, phenols or urea. These solutions should be kept at room temperature and not frozen.

Formaldehyde is dangerous due to the inhalation and contact hazards associated with it. Formaldehyde inhalation may lead to congestion and/or shortness of breath. In large doses, inhalation of formaldehyde has been shown to be a possible carcinogen. Frequent contact with formaldehyde can lead to drying or scaling of the skin. It is possible to develop a sensitized reaction to formaldehyde. If ingested, formaldehyde can lead to serious damage to the throat, intestines and stomach.

For more detailed information on the dangers associated with Bouin's Fixative contact the following location for a MSDS, <http://www.med-chem.com/MSDS/Bouin's%20Fixative.htm>

If your lab uses Bouin's Fixative, please contact safety at the following location, [chemwaste@mail.ncifcrf.gov](mailto:chemwaste@mail.ncifcrf.gov). If you have Bouin's Fixative that you want to dispose of, please call X5718 or email [chemwaste@mail.ncifcrf.gov](mailto:chemwaste@mail.ncifcrf.gov). There are less hazardous substitutes for Bouin's Fixative such as modified Davidson's Fixative or Bouin's Fixative Substitute that are picric acid free. If you would like to review these product substitutes, the following web site is available at <http://www.imebinc.com/Item/BOUINS.htm>.