



# Bouin's Solution

## Intended Use

Bouin's is intended as a special fixative or a mordant for tissues to be examined by light microscopy. It is useful for surgical tissues and necropsy specimens.

## General Information

Bouin's is a strong coagulative fixative. It also is used as a mordant for special stains. Bouin's causes fixation that results in sharp nuclear detail. It rapidly precipitates nucleoprotein. However, it lyses erythrocytes and sub-cellular cytoplasmic granules. Staining with hematoxylin and eosin following fixation with Bouin's generally produces less differentiation of cytoplasmic components by eosin than that seen following fixation with aldehyde fixatives.

Bouin's is used commonly as a mordant for some special stains. Trichrome stains are enhanced by Bouin's. Tissue sections show improved staining of non-nuclear connective tissue and smooth muscle elements following mordant treatment with Bouin's.

## Packaging

Catalog #	Volume
1995	½ x 196/cs
1996	1oz x 144/cs
1997	2oz x 180/cs
2005	1 qt
2010	1 gal
2012	5 gal cube

## Fixation Procedure

Bouin's usually is not used as a routine fixative in the histology laboratory. It often is used as a fixative for special tissues such as G.I. biopsies that are poorly fixed by 10% neutral buffered formalin.

1. The biopsies or tissues should be added directly to the Bouin's fixative. No other dilution or addition of other agents is necessary before use.
2. Small biopsies, such as G.I. biopsies, should be fixed at least 3 hours prior to processing. Large tissues, such as tissue blocks from lymph nodes or spleen or breast or colon, are best fixed 10-12 hours, although fixation for 4-6 hours is often sufficient. Over-fixation can be a problem; tissues should generally not be fixed longer than 24 hours.
3. No washing of tissues after fixation is necessary.
4. The fixed tissues should be processed by the standard processing schedules that may vary from one hour to 12 hours. Standard recommended BBC tissue processing schedules are available on request.
5. The schedule for staining tissues fixed with Bouin's is similar to the schedule published in standard texts of histology. Our

suggested schedule follows. However, staining with eosin may be more rapid than that following fixation with aldehyde fixatives.

6. Disposal Bouin's should be monitored carefully. Consult your local waste water disposal authority for specific instructions.

## Staining Procedure

BBC RECOMMENDED AUTOMATED AND MANUAL HISTOLOGY STAINING PROCEDURE FOR HARRIS HEMATOXYLIN AND EOSIN

\*Initially deparaffinize tissue sections with BBC S1™ or Xylene

Step *	Solution	Time
1.	100% Alcohol.....	20 seconds
2.	100% Alcohol.....	20 seconds
3.	95% Alcohol.....	20 seconds
4.	95% Alcohol.....	20 seconds
5.	70% Alcohol.....	20 seconds
6.	Running H <sub>2</sub> O Wash .....	30 seconds
7.	BBC Harris Hematoxylin .....	4-5 minutes
8.	Running H <sub>2</sub> O Wash .....	1 minute
9.	BBC Acid Wash•Histo™ .....	1 minute
	or BBC Acid Alcohol•Histo™ .....	2-3 seconds
10.	Running H <sub>2</sub> O Wash .....	1 minute
11.	BBC Blueing Solution•Histo™ .....	15 seconds
12.	Running H <sub>2</sub> O Wash .....	1 minute
13.	70% Alcohol.....	30 seconds
14.	BBC Special Eosin I™ or II™, or Eosin Y, or Eosin Y with Phloxine B .....	1 minute
15.	BBC S2•Histo™ .....	20 seconds
17.	BBC S2•Histo™ .....	20 seconds
18.	BBC S2•Histo™ .....	20 seconds
19.	BBC S2•Histo™ .....	20 seconds
20.	BBC S2•Histo™ .....	20 seconds
21.	BBC S3•Histo™ or Xylene.....	20 seconds
22.	BBC S3•Histo™ or Xylene.....	30 seconds
23.	BBC S3•Histo™ or Xylene.....	30 seconds
24.	Mount and coverslip with Optic Mount I™ or an appropriate mounting medium.	

Note: Each of these reagents can be intermixed and used with other staining sequences and other manufacturer's reagents.