



10% Neutral Buffered Formalin

pH 6.8-7.2

Intended Use

10% Neutral Buffered Formalin is intended as a general purpose fixative for all tissues to be examined by light microscopy. It is useful for surgical tissues and necropsy specimens.

General Information

10% Neutral Buffered Formalin is a non-coagulative additive fixative. It is the standard fixative used in most laboratories, and it produces the set of histologic artifacts that Pathologists are trained to interpret professionally. 10% Neutral Buffered Formalin penetrates quickly, but fixes slowly. When used as a primary fixative and followed by secondary fixation by alcohol, it produces a marvelous set of consistent histologic artifacts and results. Our formulation is enhanced by buffering capacity that optimizes histologic results by light microscopy and immunohistochemistry.

Packaging

Catalog #	Volume
0111	7mL x 196/cs
MA0102010	20mL x 256/cs (10mL Fill)
MA0102011	40mL x 256/cs (30mL Fill)
MA0102012	60mL x 256/cs (45mL Fill)
MA0102013	90mL x 192/cs (60mL Fill)
MA0102014	120mL x 96/cs (90mL Fill)
0132	8 oz x 48/cs (125mL Fill)
0133	16 oz x 27/cs (250mL Fill)
0135	32 oz x 15/cs (500mL Fill)
0143	4x1 gal
0151	5 gal cube

Fixation Procedure

10% Neutral Buffered Formalin is a non-coagulative additive fixative. It is intended to be used as the standard fixative in the histology laboratory. The buffering capacity of our 10% Neutral Buffered Formalin enhances staining by H&E and immunohistochemistry.

1. The biopsies or tissues should be added directly to the 10% Neutral Buffered Formalin. No other dilution or addition of other agents is necessary before use.
2. Small biopsies, such as bone marrow 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 is not a problem; however, tissues should generally not be fixed longer than one to two weeks.
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 10% Neutral Buffered Formalin is similar to the schedule published in standard texts of histology. Our suggested schedule follows.
6. Disposal 10% Neutral Buffered Formalin should be the same as that used for fixatives containing formaldehyde. 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 S3•Histo™ or Xylene

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 ₂ O Wash	30 seconds
7. BBC Harris Hematoxylin	4-5 minutes
8. Running H ₂ O Wash	1 minute
9. BBC Acid Wash•Histo™	1 minute
or BBC Acid Alcohol•Histo™	2-3 seconds
10. Running H ₂ O Wash	1 minute
11. BBC Blueing Solution•Histo™	15 seconds
12. Running H ₂ 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.