

Slide Brite™ Xylene Substitute – Technical Memo

SOLUTION:
Slide Brite™4 X 1 Gallon
Part ABSB-04**Additionally Needed:**

Alcohol, Ethyl Denatured, 70%	Part 10844
Alcohol, Ethyl Denatured, 95%	Part 10842
Alcohol, Ethyl Denatured, 100%	Part 10841
S Mounting Medium	Part 6751

For storage requirements and expiration date refer to individual bottle labels.

APPLICATION:

Newcomer Supply Slide Brite™ Xylene Substitute is classified as an aliphatic hydrocarbon that provides a safe alternative to xylene, reduces risks and improves personnel safety in the laboratory. Benefits of Slide Brite™ Xylene Substitute include:

- Odorless, non-hazardous, non-irritating and fast drying.
- Gentle on tissue and enhanced nuclear detail.
- No tissue brittleness, shrinkage or adverse morphologic changes.
- Compatible with IHC staining.
- Does not require hazardous/flammable storage.
- Flash point of 61°C/142°F (29°C/84°F flash point of xylene)
- No vapor monitoring.
- Compatible on tissue processors and staining systems.

METHOD:

Fixation: Formalin 10%, Phosphate Buffered (Part 1090)

Technique: Paraffin, frozen sections, smears

PROCESSING PROCEDURE:

1. Refer to Slide Brite™ Tissue Processing Schedule on Page 2.
2. Use three Slide Brite™ clearing stations, 60 minutes each.
 - a. For two clearing stations, allow 90 minutes per station.
3. Rotate, filter and/or replace Slide Brite™ stations daily or after processing approximately 1000 blocks.
4. Test and optimize Slide Brite™ as a clearing agent in tissue processing schedules prior to standard use.

STAINING PROCEDURE:

1. Refer to Slide Brite™ Staining Procedure on Page 2.
2. For best deparaffinization results, place warm slides directly from dryer/oven into Slide Brite™.
3. Deparaffinize warm slides thoroughly in three changes of Slide Brite™, 3 minutes each. Hydrate through two changes each of 100% and 95% ethyl alcohols, 10 dips each. Wash well with distilled water.
 - a. See Procedure Notes #1, #2 and #3.
4. Proceed with staining protocol.
5. Dehydrate in two changes of 95% and three changes of 100% ethyl alcohol. Clear in four changes of Slide Brite™.
6. Coverslip with S Mounting Medium (Part 6751).
 - a. See Procedure Note #4.
7. Test and optimize Slide Brite™ in staining procedures and automated staining systems prior to standard use.

PROCEDURE NOTES:

1. Deparaffinization and clearing steps may require longer timings than xylene.
2. Due to absorption rates Slide Brite™ will require more frequent changes compared to xylene.
3. Any water contamination will sit on top of Slide Brite™.
 - a. Minimize water presence by using Hydrosorb-X™ Water Absorbing Packets (STHXP) or decant water off.
4. Test Slide Brite™ compatibility with other mounting mediums prior to use.
 - a. If mounting medium displays separation or is not readily miscible, it is incompatible with Slide Brite™.
5. Slide Brite™ is not recommended for automated coverslippers.
6. Slide Brite™ will not remove adhered coverslips as well as xylene.
7. Refer to manufacturer's specifications on the use of Slide Brite™ on all instrumentation.

REFERENCES:

1. Dapson, Janet Crookham, and Richard W. Dapson. *Hazardous Materials in the Histopathology Laboratory: Regulations, Risks, Handling and Disposal*. 4th ed. Battle Creek, MI: Anatech, 2005. 150-155, 235.
2. Wynnchuk, Maria. "Evaluation of Xylene Substitutes for Paraffin Tissue Processing." *The Journal of Histotechnology* 17.2 (1994): 143-149.
3. Modifications developed by Newcomer Supply Laboratory.

Slide Brite™ Routine Tissue Processing Schedule

Station	Solution/Reagent	Heat	Vacuum	Time
1	Formalin 10%, Phosphate Buffered	Off	Off	90 Minutes
2	Formalin 10%, Phosphate Buffered	Off	Off	90 Minutes
3	70% Alcohol, Ethyl Denatured	Off	Off	30 Minutes
4	95% Alcohol, Ethyl Denatured	Off	Off	40 Minutes
5	100% Alcohol, Ethyl Denatured	Off	15 mm Hg	50 Minutes
6	100% Alcohol, Ethyl Denatured	Off	15 mm Hg	40 Minutes
7	100% Alcohol, Ethyl Denatured	Off	15 mm Hg	40 Minutes
8	Slide Brite™	Off/On 38°C	15 mm Hg	60 Minutes
9	Slide Brite™	Off/On 38°C	15 mm Hg	60 Minutes
10	Slide Brite™	Off/On 38°C	15 mm Hg	60 Minutes
11	Paraffin	60°C	15 mm Hg	120 Minutes
12	Paraffin	60°C	15 mm Hg	60 Minutes

Slide Brite™ Routine Tissue Processing Notes:

- When using only two clearing stations, increase time from 60 minutes to 90 minutes per station (Steps #8 to #10).
- Rotate, filter and/or replace Slide Brite™ solutions daily or after processing approximately 1000 blocks.

Slide Brite™ Staining Procedure

Step	Solution/Reagent	Time
1	Slide Dryer/Oven 58°C-60°C	
2	Slide Brite™	3 Minutes
3	Slide Brite™	3 Minutes
4	Slide Brite™	3 Minutes
5	100% Alcohol, Ethyl Denatured	30 Seconds/10 Dips
6	100% Alcohol, Ethyl Denatured	30 Seconds/10 Dips
7	95% Alcohol, Ethyl Denatured	30 Seconds/10 Dips
8	95% Alcohol, Ethyl Denatured	30 Seconds/10 Dips
9	Distilled Water Rinse	30 Seconds Minimum
10	Proceed with Staining Protocol.	
11	95% Alcohol, Ethyl Denatured	30 Seconds/10 Dips
12	95% Alcohol, Ethyl Denatured	30 Seconds/10 Dips
13	100% Alcohol, Ethyl Denatured	30 Seconds/10 Dips
14	100% Alcohol, Ethyl Denatured	1 Minute
15	100% Alcohol, Ethyl Denatured	1 Minute
16	Slide Brite™ Clearing Agent	1 Minute
17	Slide Brite™ Clearing Agent	1 Minute
18	Slide Brite™ Clearing Agent	2 Minutes
19	Slide Brite™ Clearing Agent	2 Minutes
20	Coverslip with S Mounting Medium	

Slide Brite™ Staining Procedure Notes:

- For best deparaffinization results, place warm slides directly from dryer/oven into Slide Brite™ (Step #2).
- S Mounting Medium (Part 6751) is the recommended mounting medium with Slide Brite™.