

Thermo Scientific Histoplast Paraffin Instructions for Use

For in vitro diagnostic use.

For use as an infiltration and embedding medium in histology.

Thermo Scientific™ Histoplast™ Paraffin is specifically designed for tissue processing and embedding of histological and cytological specimens. The product is a white solid at room temperature and a clear, colorless liquid when molten. Histoplast Paraffin is highly quality controlled. It can be used with both open and closed tissue processors. It is also compatible with all embedding centers and manual embedding techniques. Histoplast Paraffin should be stored in a cool, dry place.

Instructions For Use

Temperatures

Histoplast Paraffin Melting Points:

8330 – Histoplast PE: 56-57° C (for infiltration only)

8331 – Histoplast IM: 56-57° C (for infiltration and embedding)

8332 – Histoplast LP: 50-54° C (for infiltration and embedding)

It is not required that paraffin be molten prior to placing on the tissue processor. However, the user should allow for adequate melting time, as the paraffin must be completely molten prior to starting a tissue processing run. Best practice is to pre-melt the paraffin, such as in a paraffin pot, prior to placing on the tissue processor. The temperature of the paraffin pot, processor's paraffin chambers, and embedding center should be monitored regularly.

Tissue Processing

Histoplast Paraffin is used in tissue processing during the infiltration steps. Vacuum has been viewed as an asset during all phases of tissue processing, including infiltration. A typical tissue processing schedule would include two to four steps of molten paraffin. The time in each Histoplast Paraffin station should be approximately 1 hour for a normal, multiple tissue type and thickness processing run.

Protocols

The following tissue processing schedule is recommended for the average hospital surgical load.

| Station | Solution | Time |
|---------|--|------------|
| 1 | 10% Neutral Buffered Formalin | Holding |
| 2 | 10% Neutral Buffered Formalin | 1 hour |
| 3 | Pen-Fix or 80% Denatured Ethyl Alcohol | 40 minutes |
| 4 | 95% Denatured Ethyl Alcohol | 40 minutes |
| 5 | 95% Denatured Ethyl Alcohol | 40 minutes |
| 6 | 100% Denatured Ethyl Alcohol | 40 minutes |
| 7 | 100% Denatured Ethyl Alcohol | 40 minutes |
| 8 | 100% Denatured Ethyl Alcohol | 40 minutes |
| 9 | Clearing Reagent | 1 hour |
| 10 | Clearing Reagent | 1 hour |
| 11 | Histoplast Paraffin | 1 hour |
| 12 | Histoplast Paraffin | 1 hour |

Note: This procedure may not fit every situation. Modifications may be necessary.

When small biopsy or thin tissue specimens (less than 2 mm in thickness) are processed separately, the following tissue processing schedule is recommended. Tissues are assumed to be fixed. If not, stations 1 and 2 should utilize 10% Neutral Buffered Formalin for a minimum of 30 minutes each.

| Station | Solution | Time |
|---------|--|--------------|
| 1 | 10% Neutral Buffered Formalin | (30 minutes) |
| 2 | 10% Neutral Buffered Formalin | (30 minutes) |
| 3 | Pen-Fix or 80% Denatured Ethyl Alcohol | 10 minutes |
| 4 | 95% Denatured Ethyl Alcohol | 10 minutes |
| 5 | 95% Denatured Ethyl Alcohol | 10 minutes |
| 6 | 100% Denatured Ethyl Alcohol | 10 minutes |
| 7 | 100% Denatured Ethyl Alcohol | 10 minutes |
| 8 | 100% Denatured Ethyl Alcohol | 10 minutes |
| 9 | Clearing Reagent | 15 minutes |
| 10 | Clearing Reagent | 15 minutes |
| 11 | Histoplast Paraffin | 20 minutes |
| 12 | Histoplast Paraffin | 20 minutes |

Note: This procedure may not fit every situation. Modifications may be necessary.

Embedding

The tissue processing sequence infiltrates tissues with molten Histoplast Paraffin. After processing, the tissue must additionally be embedded in Histoplast Paraffin. Histoplast Paraffin, either solid or molten, is added to the paraffin holding station in the embedding center. The holding station should have the temperature adjusted such that it is slightly over the melting point of the Histoplast Paraffin in use.

Remove one cassette from the cassette holding station of the embedding center. Open cassette and examine tissue (best practice during embedding is to open one cassette at a time). Choose an embedding mold of appropriate size that best accommodates the tissue. Add a little molten Histoplast Paraffin to the mold, transfer to the cooling plate for a moment and allow it to just begin to solidify at the bottom of the mold. Add the tissue to the bottom of the mold. It is best practice to embed tissues such that they are all on one plane, and at the bottom of the mold. Add cassette to top of the mold. Add more molten Histoplast Paraffin, until the bottom of the cassette is partly filled with paraffin. Transfer to the cooling plate and allow solidifying. After the Histoplast Paraffin is solidified, remove the embedding mold.

Remove excess Histoplast Paraffin from perimeter of cassette, if necessary.

Note: The laboratory should develop a temperature monitoring schedule and product rotation/change out schedule that adheres to the policies of their department for both tissue processing and embedding.

Warnings and Precautions

See Safety Data Sheets for warnings and precautions, as well as EUH code definitions.

See container label for warnings and precautions.

Order Information

| Product | Size | Qty. | REF |
|---------------|----------------|------------|------|
| Histoplast PE | 2.2 lb. (1 kg) | 8 bags/cs. | 8330 |
| Histoplast IM | 2.2 lb. (1 kg) | 8 bags/cs. | 8331 |
| Histoplast LP | 2.2 lb. (1 kg) | 8 bags/cs. | 8332 |

