

TECHNICAL DATA SHEET 429

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PolyFin®

Paraffin Embedding Wax

Introduction:

Paraffin has been used in biological sciences since the late 1800's and has been the foundation for histological technique for many years. With the introduction of Teflon coated blades, the cutting characteristics of most paraffins has improved significantly. However, with the increased demand for immuno-staining, and other specialty histological procedures, cutting characteristics by themselves are no longer of primary importance. Melting point, infiltrating ability, shrinkage, expansion, compression and elasticity are but some of the criteria that current paraffins must meet. In recent years some significant improvements have been made in the quality and cutting characteristics of paraffins, and according to a study conducted by one of the country's leading histologists, Polyfin has emerged as the outstanding paraffin for infiltrating, embedding, and cutting processed tissue.

- Polyfin is a mixture of fine paraffin waxes and copolymer alloys in the form of milk-white pellets having a melting point of 55°C.
- Polyfin has been institutionally tested and found to function flawlessly in pressure/vacuum fluid flow tissue processors as well as in pulsating processors.
- Polyfin produces the most homogenous paraffin impregnation. As a result, tissue processed in Polyfin will have less artifacts and better infiltration, yielding higher quality staining for microscopic examinations.
- Polyfin shrinks a mere 9.4% during normal cooling. This is far less than any other leading paraffins. Tissues embedded in Polyfin will yield better sections due to less compression.
- Polyfin processed and embedded tissue has been shown to require less icing during the cutting process. This reduces the need to use ozone depleting freezing sprays, and reduces the time required to get quality sections.
- Polyfin processed and embedded tissue had a combined compression (vertical and horizontal) during cutting which was lower than most other leading paraffins. Compressed cellular components are more difficult to identify when viewed under the microscope.
Polyfin processed and embedded tissue produced the least amount of shrinkage or expansion when the cut sections were floated on a water bath. As a result, these sections would be most representative of the tissue prior to processing.
- Polyfin cuts routinely at two microns without icing.

Instructions for Use:

Recommended infiltration temperature is approximately two degrees above melting point of paraffin. Infiltration time will range from 2 to 4 hours, depending on quantity and type of tissue in a closed tissue processor. A minimum of two changes of paraffin in vacuum is necessary for proper infiltration. Optimum cooling temperature during embedding is 0° to minus 5°C. Block temperature during cutting can range from room temperature to 5°C depending on personal preference. Water bath temperature should be five to ten degrees below the melting point of the paraffin.

Storage:

Do not store above 35°C.

Ordering Information:

Cat. #	Description	Size
19562	Polyfin™, Paraffin Embedding Wax	8 x 1kg bag/case

To Order:

In The U.S. Call: 1-800-523-2575 • 215-343-6484

In The U.S. FAX: 1-800-343-3291 • 215-343-0214

In Germany Call: (49) 6221-765767

In Germany FAX: (49) 6221-764620

Order online anytime at www.polysciences.com