Formical 2000™
Technical Data Sheet & IFU

Formical 2000™ is a fast yet gentle bone decalcifier that has been formulated from semiconductor grade formic acid, highly purified reagent grade water and EDTA. It is compatible with most all fixatives and all standard H&E staining procedures and special stains. Specimens cut with ease and routine techniques produce excellent stained sections. Minimum danger of over decalcification. Formic acid is faster than Immunocal™ and will safely decalcify bone without destroying antigen sites.

APPLICATIONS/INTENDED USE
Tissue containing calcium must undergo calcium removal before tissue processing, unless specific studies requiring undecalcified bone are requested. Formical 2000™ is a formic acid decalcification solution that will not destroy antigenic binding sites

STORAGE/ SAFETY
Storage: Room Temperature
Refer to SDS for details-

Always wear appropriate personal protective equipment to include gloves, eye protection and laboratory coats when working with chemicals.

RESULTS
To determine the end point of the decalcification probing tissues to determine flexibility is the most common method. For a more accurate method, the ammonium oxalate turbidity test is recommended.

PROCEDURE
1. Specimens must be fixed before exposure to an acid solution.
2. Briefly rinse fixed tis=sue in running water.
3. Immerse rinsed tissue in a volume of Formical-2000™ equal to at least 20 times the volume of tissue.
4. It is best to suspend the specimen so it is not in contact with any of the surfaces of the container. This allows exposure to all specimen surfaces and allows the precipitated calcium salts to sink to the bottom of the container.
5. Small specimens should not be left in the solution overnight. If decalcification process is incomplete, wash it in water and return to fixative.
6. Wash again and continue Step #5/6 until specimen is completely decalcified.
7. **Please Note:** *If you plan* to stain the section with a Potassium Ferrocyanide / HCL stain, a minimum 10 minute rinse is recommended.
8. Process tissues, embed and cut.
9. See technical information column for more information.

TECHNICAL INFORMATION
1. Embed the harder cortical bone so that it is the last surface to be sectioned and at an angle so that the knife/blade doesn't contact the entire surface at once.
2. A heavy duty blade or high profile blade may work better if available.
3. If decalcification process was incomplete, surface decalcification techniques may be used. Be certain to rinse the block before it is placed on the microtome (decal solution is corrosive.
4. To surface decalcify embedded bone, place a small dish of Formical-2000™ on ice. Place the face of the block in the dish for 5-10 minutes.
5. Rinse the block in cold water. Icing tends to make the block harder and the water shed tends to soften the tissue face. Icing will greatly reduce the amount of chattering, especially in large blocks.
6. Gentle agitation will greatly enhance decalcification quality and reduce decalcification time. Gentle application of heat will also reduce decalcification times.

CONTACT INFORMATION
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