

# Technical Data Sheet

## Fixative/Decalcifier

**#64148-01**

### ***Suggested Methodology for 0.2 cm Bone Marrow Biopsies***

*Processing time: 1 hour*

### **Fixative/Decalcifier may be used to process all types of calcified histological specimens.**

This methodology is meant to be used as a guideline in establishing a protocol. Larger, more dense bone will take longer to decalcify than the tissue referred to here. Fixation and decalcification times will need to be increased for denser, larger bone.

#### *Consistency*

It is easier to achieve consistent results by preparing uniform specimens for decalcification. For larger bone, the use of a bone saw is highly recommended. If decalcification time exceeds 24 hours, it is best to replace the decalcifying solution with fresh solution daily.

#### *Fixation*

There is no need for fixation prior to decalcification. Fresh tissue sections should be immersed directly into a volume of **Fixative/Decalcifier** equal to at least 20 times the volume of tissue. If large specimens arrive in a fixative they may be transferred into a volume of **Fixative/Decalcifier** equal to at least 20 times the volume of tissue.

#### *Agitation and Heat*

Gentle agitation will greatly enhance decalcification quality and reduce decalcification time. Gentle application of heat will also reduce decalcification times.

#### *Endpoint*

Check tissue every half hour. Probing tissue to determine flexibility is the simplest and most common method for determining endpoint. Furthermore, if the tissue begins to float in solution, decalcification is usually complete. However, tissue will not necessarily float when it is decalcified. For a more accurate endpoint determination, please refer to the ammonium oxalate turbidity test.

#### *Processing*

After decalcification is complete, rinse tissue briefly in deionized water before placing tissue in the processor. This will enhance staining after processing. The use of deionized water eliminates the possible contamination of tissue by such chemicals as chlorine, sulphur, magnesium, lead and innumerable other contaminants which may be present in municipal tap water.

#### *Please Note*

*If you plan* to stain the section with a Potassium Ferrocyanide / Hcl stain, a minimum 10 minute rinse is recommended.