

Ultra Low Viscosity Kits

Use Instructions



Ultra Low Viscosity Kit SPI# 02682

The Ultra Low Viscosity Kit is characterized by a viscosity of only 20 cps at 25°C. This kit is ideal for rapid embedding schedules and facilitates cutting large sections, even from difficult materials. The article (Oliveira L. et. al. 1983) uses a wide variety of plant tissues for embedment with VCD-HXSA* and compares its usefulness to that of Epon and Spurr's resin.

PROCEDURE:

Initial Fixation - 2-4% (v/v) glutaraldehyde in 0.1M cacodylate buffer, pH 7.0. Postfixation - 1-2% (w/v) buffered osmium tetroxide. In some cases ruthenium red is added (0.1%, w/v) to the postfix to enhance contrast of the sections.

Dehydration - Dehydrate in a standard methanol series.

Mixing schedules:

VCD	10g
n-OSA	20g
BDE	0.3g
DMAE	0.3g

Infiltration:

Replace dehydrating agent at two hour intervals with 3:1, 1:1, 1:3 solutions of the solvent: embedding medium. Then transfer materials to 100% embedding medium overnight.

Embed in BEEM reg; capsules and place in over at 50deg; C - 60 deg; C for 6-12 hours respectively.

For rapid embedding, infiltrate each step for 15 followed by two changes in 100% embedding medium.

Reference:

Oliveira L. et. at., J. Microscopy 132, 195-201 (1983)

HXSA has been substituted with n-OSA (Octynel Succinic Anhydride)