

Technical Data Sheet

Styrene Monomer Polyester Resin Embedding

#14650

Styrene Monomer is very low in viscosity and penetrates rapidly into tissue. It is soluble in ethanol and acetone. However, infiltration and embedding can be done by styrene alone, and there is no need to dilute it with solvents. The specimens are dehydrated in ethanol or acetone and then in styrene-two changes of 30 minutes each is standard.

Mixture 1 (DeLamater et al., 1971)

Monomeric Styrene	10g
Methyl Ethyl Ketone (UV Initiator)	0.4g
Dibutyl Phthalate (Plasticizer)	0.15g

Polymerization can be achieved either by UV light or in an oven at 60°C for 2-3 days in sealed capsules.

Mixture 2 (Kushida, 1982b)

Monomeric Styrene	3g
n-Butyl methacrylate	7g
Benzoyl Peroxide (Catalyst)	0.1g (1%)

Polymerization can be achieved by UV light or in an oven at 60°C for 24 hours in sealed capsules.

Expect blocks to shrink approximately 17% due to the nature of a monomeric styrene.