

QuickCure Acrylic Mounting Resin

Date: 10/2020, v1.7

Refer to the SDS document for additional safety information.



Technical Information	
Mixing Ratio (by volume)	2:1 Powder to Liquid*
Curing Time	15-20 minutes*
Pot Life	3 minutes*
Peak Exothermic Curing Temperature	140 °F (60 °C)*
Durometer Hardness	80D

* Optimum mixing ratio

QuickCure is a clear, fast-curing acrylic for cold mounting of metallographic specimens and printed circuit boards (PCBs). It provides good edge retention, low shrinkage and flow properties that allow it to easily fill pores, cracks and through-holes.

Instructions

1. Clean the sample using micro organic soap, isopropyl alcohol and/or an ultrasonic cleaner to improve mounting material adhesion and prevent outgassing. Dry with heat or clean air to remove all moisture prior to mounting.
2. Pour two (2) parts powder into a mixing cup and one (1) part liquid into another cup.
Note: Do not use wax lined or paper cups. Unless they are cooled in water, the use of disposable mounting cups is also not recommended to avoid melting the cup itself.
3. Pour the powder into the liquid. Stir gently until the mixture appears homogenous.
Note: If a thinner mixture is desired, more liquid can be added; however, the cure time will increase.
4. Pour the mixture over the sample in the mounting cup.
5. Let the mount harden/cure.

Eliminating Bubbles & Air Pockets

A pressure chamber can be used to eliminate bubble formation by filling open pores and cavities, which can interfere with adhesion of the mounting resin to the sample and can collect debris during grinding and polishing. Debris will contaminate the polishing cloths, leaving scratches on the polished surface. After pouring the acrylic, fully cure the mount in a pressure chamber at 25-30 psi.

Sample Removal

When cured, QuickCure is non-soluble in alcohol and soluble in acetone. If a sample needs to be removed from acrylic that is cured or not fully cured, it can be dissolved using acetone.

Table 1: QuickCure Standard Curing Parameters

Mount Size	Cure Time (Minutes)*	Mixing Ratio	Weight (g)**	
			Powder	Hardener
 1" / 25 mm	15-20	2:1	10.47	6.15
 1.25" / 32 mm	15-20	2:1	13.53	7.95
 1.5" / 38-40 mm	15-20	2:1	19.5	11.45
 2" / 50 mm	15-20	2:1	28.88	16.96

* Mixing ratio and room temperature will influence performance and the data in the table above; if mixture of components by weight is not done precisely, these numbers will also vary. Place large molds into a shallow bath of water to reduce exothermic heat.

** Per one (1) mount