



CROSSLINK TECHNOLOGY INC.
FORMULATED EPOXIES, URETHANES • CUSTOM CAST ELECTRICAL PARTS



How to remove cured Epoxy or Polyurethane

At best it is difficult to remove cured material without damaging the encapsulated components. In certain instances however, where the embedded component is reusable, such as an encapsulated conductor, it is worth while to remove the encapsulant and reclaim the embed part.

The easiest method to remove epoxy or polyurethane is to heat it above its glass transition (softening point) temperature. At this point the encapsulant will be soft enough to cut or penetrate with a chisel like device and break it away from the embedded component. This method is more convenient for recovering heavier solid components than reclaiming delicate electronic circuits. Epoxies and polyurethanes will smoke and give off odours when heated to high temperatures. Provide an appropriate face mask and good ventilation while removing the encapsulant using this method.

The other method is to immerse the encapsulated component in Methylene Chloride. This solvent is hard to obtain as it has been declared a carcinogen. The user must take all precautions to prevent contact with skin and not to inhale the vapours while using this product. Methylene Chloride will cause the encapsulant to swell and become soft for removal. Unfortunately, since printed circuit boards and many electronic components are also encapsulated with epoxy, they will also be damaged or destroyed by this solvent.

There has been some success reported in using the commonly available paint stripper sold under the trade name Circa 1867. Immersing the encapsulated component in this material will also soften the encapsulant the same as Methylene Chloride and of course, it will also attack and destroy any embedded epoxy devices.

Disclaimer: The above information is general in nature and is based solely on experiences by Crosslink Technology Inc. The recommendations provided herein may not be applicable in all situations. They are provided to the recipient as part of our customer service and the user must determine the relevance of the information to his/her application, considering any limitations that may be applicable thereto. Crosslink technology Inc. does not accept any liability for direct or consequential damages resulting from the the implementations of these recommendations or the use of this information.