## EPOXACRY

TOUGHENED RIGID HYBRID POLYMER RESIN



HIGH **PERFORMANCE** O&P LAMINATING

> **Fast Setting** Formula

> > SKU: EAC

XCEPTIONAL PERFORMANCE IS TO BE ▲ EXPECTED FROM THIS VACUUM BAGGING **RESIN FOR THE LAMINATION OF ALL TYPES** OF PROSTHETIC CONTAINMENT SOCKETS.

IR POCKETS AND POROSITY ARE NOT AN ISSUE WHEN USING THIS FAST SETTING FORMULA WITH EXCELLENT FIBER WET-OUT, PERFECTED FOR PRODUCING HIGH OUALITY LIGHT WEIGHT LAMINATIONS.

LEAR CURED COLOR DUE TO OUR PROPRIETARY FORMULATION PROCESS. PROVEN STRENGTH AND RESILIENCE FOR INCREASED STABILITY AND A FLAWLESS CRACK FREE SURFACE FINISH. MAKE SURE THAT YOU ARE USING THE BEST.

See Reverse Side for Product Technical Information Sheet

- Extremely easy to work with and pigment, allowing you to fabricate rigid thin wall fabrications with smooth finished edges that have excellent strength, toughness, and with mechanical properties similar to an epoxy.
- Produces bubble and tack free laminates with excellent fiber wet out that saves you time, money, increases shop productivity, and will not crush your EVA or silicone liner from excessive pressure while curing.
- Available in 1, 2 and 4 Gallon Jug Kits. BP150 Powder or BP100 Paste Hardener sold separately.

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## EPOXACRYL Product Technical Information Sheet

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- Viscosity tailored for vacuum bag infusion of prosthetic sockets.
- ♦ Fast curing user friendly formulation with BP paste or powder hardener.
- ♦ Fast fiber penetration and wet out with excellent secondary lamination adhesion.
- ♦ Fabrication of high quality light weight rigid laminations with a scratch and mar resistant surface.
- Maintains strength and shape in thin wall laminations.
- ♦ Low shrinkage of less than 2%.
- ♦ Skin friendly surface and the edges are easily sanded and buffed to a fine smooth finish.
- ♦ Clear resin easily pigmented to any desired color.
- ♦ Does not liberate gas, entrap air bubbles or develop air pockets during the curing process.
- ♦ Increased shelf life up to 12 months with proper storage, (between 50\*F / 10\*C and 82\*F / 28\*C)
- ♦ Excellent fatigue strength and toughness for long lasting durability and performance.
- ♦ Great resin for increased shop cost savings and productivity.

EPOXACRYL is a high performance thermoset vacuum bagging polymer matrix resin that provides exceptional fracture toughness and crack free surfaces when fully cured at room temperature, as well as ease of use for the fabrication of prosthetic containment sockets and other orthopedic parts.

EPOXACRYL is formulated to have a gel time of between  $12 \sim 15$  minutes when combined with the recommended 2 % BP150 powder or BP100 paste hardener, measured by mass or volume, with a shop temperature of 75\* F / 24\* C. Use a precision scale or volumetric measuring spoon to measure the hardener to achieve consistent results.

Warmer summer shop temperatures will reduce the viscosity and speed up the curing time. (10 minutes @ 28\*C)

Cooler winter shop temperatures will increase the viscosity and slow down the curing time. (18 minutes @ 20\*C)

The cure rate of this resin is temperature and volume sensitive, which means that a large quantity of resin will cure faster than a smaller amount, causing the thinner sections of your laminate to take several minutes longer to cure than the thicker sections. Very thin sections may require the application of some external heat to speed up the cure. After the resin has been strung into position satisfactorily, heat may be applied using a hot air gun set at 120\*C / 250\*F to the entire thin wall surface of the fabrication for 5 minutes to accelerate the curing process, thereafter the resin will cure and harden rapidly. Before demolding, always check to make sure that the resin has fully cured.

EPOXACRYL will achieve high strength with a dust dry surface after 30 minutes, however, it will continue to get harder and tougher for up to 24 hours. EPOXACRYL is formulated for use with carbon, glass, kevlar and all synthetic textile fiber reinforcement materials.

To achieve the best results, always laminate over a sealed or as dry a cast as possible. If it is not possible and the cast is damp, use one of our Latex Isolation Sheaths and a PVA release film bag to isolate the resin from the moisture. Remember to dry the inner and outer vacuum bag surfaces.

EPOXACRYL resin stored beyond the date specified on the label does not necessarily mean that the product is no longer usable. In this case however, a performance test must be done on a small 50g sample of resin to determine it's suitability for the intended usage. Contact our office for more technical information and fabrication tips.

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