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DURALAM

HYBRID VINYL POLYMER RESIN
Formulated for the O&P Professional,
providing unmatched ease of use and
superior elevated vacuum performance.

Very low odor and excellent fiber wet-out
Fast Setting Suppressed Volatiles formula
One shot only semi Heat Relievable
Cures to a nice clear color & non yellowing
Good suspension vacuum retention
No PETG socket liner needed

SKU: DAL

THE MOST VERSATILE AND COST EFFECTIVE VACUUM BAGGING RESIN



See Reverse Side for Product Technical Information Sheet

- *Extremely easy to work with, providing excellent fiber wet out, allowing you to fabricate rigid thin wall fabrications with super smooth finished edges.*
- *Produces bubble and crack free socket laminations with high flexural strength, good hardness and clarity, that saves you time, money, increases shop productivity, and will not crush your liners from excessive pressure.*
- *Available in 1, 2 and 4 Gallon Jug Kits. BP100 Paste Hardener sold separately.*

ORTHOLAM Inc. USA

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DURALAM

Product Technical Information Sheet

- ♦ Fast curing formula with low volatile emissions.
- ♦ Good choice of resin for elevated vacuum applications.
- ♦ Provides excellent fiber wet out and adhesion.
- ♦ Easily pigmented to any desired color, non-yellowing.
- ♦ Increased shelf life up to 12 months with proper storage, (between 50°F / 10°C and 82°F / 28°C) .
- ♦ Fabricates high quality light weight sockets.
- ♦ Skin friendly surface and the edges are easily sanded and buffed to a fine smooth finish.
- ♦ Low shrinkage of less than 3%.
- ♦ Transparent cured resin color with improved clarity.
- ♦ Does not liberate gas and will not develop air pockets during the curing process.
- ♦ Great resin for increased shop cost savings, productivity and no PETG liner needed for suspension.

DURALAM is a high performance vacuum infusion resin that provides exceptional physical properties and fracture toughness when fully cured at room temperature, as well as ease of use to the Prosthetic and Orthotic industry.

DURALAM is formulated to have a gel time of between 13 ~ 15 minutes when combined with the recommended **2.5%** BP100 paste hardener, measured by mass or volume, with a shop temperature of 75°F / 24°C.

(Gel Time with 3% hardener = 11 mins).

Please use a precision scale or volumetric measuring spoon to measure the hardener to achieve consistent results.

The BP100 paste hardener must be thoroughly and evenly dispersed into the resin. (takes approximately 2 minutes)

Warm the cast to 24° C / 75° F and laminate over as dry a cast as possible to achieve the best 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. Apply some external heat from a hot air gun to thin sections to speed up and fully cure the resin.

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 2 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.

DURALAM will achieve high strength with a dust dry surface after 30 minutes, however, it will continue to get harder, stronger and tougher for up to 48 hours.

DURALAM is formulated for use with carbon, glass, basalt and synthetic textile fiber reinforcement materials.

Depending on the type and quantity of reinforcement materials used in your layup, it should be possible to heat relieve a socket by the application of heat after the resin has cured, but the temperature must not exceed 250°F / 120°C.

To achieve the best results, always laminate over as dry a cast as possible. If it is not possible to have a dry cast, we recommend that you seal the surface of the cast with a resin coating, or use a 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.

Storage of **DURALAM** resin 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 its suitability for the intended usage. Contact our office for more technical information and fabrication tips.

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