

Section 1: Description

The Resin Research Prepreg System was originally developed as a production tool for easy small parts manufacturing and today finds use in a wide variety of composite products. It is a modified bisphenol A resin of medium viscosity offering an excellent balance of color, UV stability, easy mix ratios, extremely low vapor pressure and high gloss finish. For do it yourself prepreg, wet out can be done on a wet out table or with a prepreg machine and rolled into plastic. The impregnated fabric is then put into a standard freezer where it is usable for up to 30 days. A desired piece of the frozen prepreg can be cut off the roll then cut into the desired shape. The unused part of the roll is then put back into the freezer. The impregnated fabric is then pressed or vacuumed into place followed by heat curing at 150F. Full cure for a finished part is achieved in just two hours.

Section 2: Advantages

- Very low color and good color stability
- Good chemical resistance
- High gloss
- Good resistance to amine blush
- Low viscosity
- Excellent production tool

Section 3: Applications

- Fast Parts Manufacture
- Vacuum processing
- Automobile parts
- Sports equipment

Section 4: Handling Precautions

Refer to the Safety Data Sheet

Section 5: Storage Life

At least 12 months from the date of manufacture in the original sealed container at ambient temperature. Store away from heat and excessive humidity in tightly closed containers.

Section 6: Typical Properties

Appearance Clear Liquid
Color (Gardner) 1
Viscosity @ 77 °F (cP) 1000 - 1500 mixed
Epoxide Equivalent Weight Resin 180
Specific Gravity Mixed @ 77 °F 1.15
Density Mixed @ 77 °F (lb/gal) 9.2
Flash Point Resin CC - NA
Flash Point Hardener CC - 100F
Recommended Use Level:
100/45 weight or 100/50 volume

Section 7: Typical Handling Properties

Use Level (R/H) 100 to 45W - 100 to 50V
Mixed Viscosity @ 77 °F (cP) 2500 - 4000
Gel Time (150g mix @ 77 °F) 140 min.
Set Cure demolding @ 150°F .5 Hrs.
Full Cure demolding @ 150F 2 Hrs.

Section 8: Typical Performance

(When cured 7 day cure @ 77 °F)
Heat Deflection Temperature (°F) 225F
Tensile Strength (psi) 11800
Tensile Modulus 505,000
Tensile Elongation (%) 3.8
Flexural Strength (psi) 16,400
Flexural Modulus 520,000
Hardness (Shore D) 86
Compression Yield 17,400
Mar Resistance (kg) — 1.25

Section 9: Typical Cure Schedules

2 Hours at 150F