

Section 1: Description

The Composite Pro System was originally developed for infusion, RTM Light and fabric intensive hand layup marine composites and today finds use in a wide variety of composite products. It is a modified bisphenol A resin of low viscosity offering an excellent balance of color, UV stability, varying hardener speeds, easy mix ratios, extremely low vapor pressure, excellent chemical adhesion, and high gloss finish. Varying flexibility in the different resins allow production of varying degrees of stiffness or flexibility, 2050 being the stiffest, 2070 being more flexible and 2090 being the most flexible. Different composite fabrics and different applications require different resin stiffness or toughness. All can be satisfied with the use of this one system.

Section 2: Advantages

- Very low color and good color stability
- Good chemical resistance
- High gloss
- Easy wet out of difficult fabrics
- Low viscosity
- Variable toughness vs. modulus

Section 3: Applications

- High-solids coatings
- Infusion, RTM, fabric intensive layups
- Chemically resistant coatings

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) 399 - 600 mixed
Epoxide Equivalent Weight Resin 180
Specific Gravity @ 77 °F 1.15
Density @ 77 °F (lb/gal) 9.5
Flash Point (closed cup) (°F) NA Recommended
Hardener Use Level: 30 phr weight or 33 phr volume

Section 7: Typical Handling Properties

Use Level:
By Weight - 100 R to 30H
By Volume - 100 to 33 V
Mixed Viscosity @ 77 °F (cP) 300 - 600
Gel Time (150g mix @ 77 °F) (Min)
Fast 20; Slow 40; X-Slow 90
Thin Film Set Time @ 77 °F (hr)
Fast 2.5; Slow 5; X-Slow 14
Thin Film Set Time @ 50 °F (hr)
Fast 7; Slow 14; X-Slow 36
Peak Exotherm (100g mix @ 77 °F)
Fast 196F; Slow 188F; X-Slow 155F

Section 8: Typical Performance

Refer to Composite Pro web page www.resinresearch.net

Section 9: Typical Cure Schedules

2-7 days at ambient temperature