

2050/2060/2070 EPOXY SYSTEMS

Section 1: Description

Composite Pro was designed as a Professional Composite system, ideal for large and/or small projects. It's low viscosity and broad range of hardener choices make it perfect for wet layup, infusion, RTM, RTM Lite or any one of the many composite production techniques used today. This system also includes three different resin variations.

2050 - Stiff - Used with stiff, lightweight, high modulus fabrics like Carbon Fiber. Ideal to combat high stress structural loading with an emphasis on fast composite rebound.

2060 - General - Excellent balance of stiffness and impact strength, the "go to" for most applications.

2070 - Impact - For use where impact loads are present. Ideal to combat an errant dock encounter or that Grand Canyon unexposed surprise.

Advantages: Low VOC, Very low color and good color stability, Good chemical resistance, High gloss, Good resistance to amine blush, Variable Toughness vs. Modulus, higher viscosity and stiffness

Storage: 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 2: Typical Handling Characteristics

Mix ratio by volume 3 parts resin : 1 part hardener

Mix ratio by weight 100 resin : 30 hardener

Recommended epoxy working temperature 80°F

MATERIAL CHARACTERISTICS	DENSITY (kg/litre)	VISCOSITY (CPS)
2050 RESIN	1.14	450
2060 RESIN	1.13	350
2070 RESIN	1.13	250
3100 XSLOW HARDENER	.95	17.4
3100 SLOW HARDENER	.96	11.8
3100 MEDIUM HARDENER	.97	12.4
3100 FAST HARDENER	1.0	14.0

CURING CHARACTERISTICS	XSLOW	SLOW	MEDIUM	FAST
POT LIFE (100g mix @77F)	50 min	30 min	16 min	12 min
POT LIFE (500mL mix @77F)	30 min	18 min	14 min	10 min
THIN FILM SET (@77F)	5 hrs	3 hrs	2 hrs	1.5 hrs
PEAK EXOTHERM (100g mix @77F)	283 F	257 F	280 F	300 F
FINAL CURE	7 DAYS	7 DAYS	7 DAYS	7 DAYS

Section 3: Typical Cured Properties

2050 System

Barcol Hardness	85
Compression Yield.....	16,100 psi
Tensile Strength	11,200 psi
Tensile Modulus.....	470,000 psi
Flexural Strength.....	13,700 psi
Flexural Modulus.....	530,000 psi
Heat Deflection Temperature.....	126°F
Elongation %.....	2.7%

2060/2070 System

Barcol Hardness	84
Compression Yield.....	15,400 psi
Tensile Strength	10,800 psi
Tensile Modulus.....	445,000 psi
Flexural Strength.....	14,900 psi
Flexural Modulus.....	510,000 psi
Heat Deflection Temperature.....	124°F
Elongation %.....	4.1%