

2050 EPOXY SYSTEMS

Section 1: Description

2050 has the highest viscosity, stiffest, least flexibility, and provides the most strength available of all systems. This option would be similar cured characteristic properties of the 2000 hand layup systems. Use this epoxy if you want to add additional strength and stiffness to your application (example: foam boards or other automotive applications requiring stiffness).

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	VISCOSITY (Cp)
2050 RESIN	1.14 kg/litre	1270
3100 XSLOW HARDENER	.95 kg/litre	17.4
3100 SLOWISH HARDENER	.95 kg/litre	14.8
3100 SLOW HARDENER	.96 kg/litre	11.8
3100 MEDIUM HARDENER	.97 kg/litre	12.4
3100 FAST HARDENER	1.0 kg/litre	14.0

CURING CHARACTERISTICS	XSLOW	SLOWISH	SLOW	MEDIUM	FAST
GEL TIME (150g mix @77F)	90 min	60 min	40 min	30 min	20 min
THIN FILM SET (@77F)	14 hrs	10 hrs	5 hrs	3.5 hrs	2.5 hrs
PEAK EXOTHERM (100g mix @77F)	155 F	165 F	188 F	192 F	196 F
FINAL CURE	7 DAYS	7 DAYS	7 DAYS	7 DAYS	7 DAYS

Section 3: Typical Cured Properties

Barcol Hardness85
 Compression Yield.....16,100 psi
 Tensile Strength11,200 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 EPOXY SYSTEMS

Section 1: Description

2060/2070 is the most versatile infusion system we offer. These two systems are the most popular due to the viscosity, stiffness, flexibility midrange specifications of our infusion systems. 2060 is recommended for infusion surf and snowboards. 2070 is recommended for kayaks or other boat infusion applications due to the flexible nature of the system. The flex technology will result in less cracking.

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

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	VISCOSITY (Cp)
2060 RESIN	1.13	956
2070 RESIN	1.13	729
3100 XSLOW HARDENER	.95 kg/litre	17.4
3100 SLOWISH HARDENER	.95 kg/litre	14.8
3100 SLOW HARDENER	.96 kg/litre	11.8
3100 MEDIUM HARDENER	.97 kg/litre	12.4
3100 FAST HARDENER	1.0 kg/litre	14.0

CURING CHARACTERISTICS	XSLOW	SLOWISH	SLOW	MEDIUM	FAST
GEL TIME (150g mix @77F)	90 min	60 min	40 min	30 min	20 min
THIN FILM SET (@77F)	14 hrs	10 hrs	5 hrs	3.5 hrs	2.5 hrs
PEAK EXOTHERM (100g mix @77F)	155 F	165 F	188 F	192 F	196 F
FINAL CURE	7 DAYS	7 DAYS	7 DAYS	7 DAYS	7 DAYS

Section 3: Typical Cured Properties

Barcol Hardness84
 Compression Yield.....15,400 psi
 Tensile Strength10,800 psi
 Tensile Modulus.....445,000 psi
 Flexural Strength.....14,900 psi
 Flexural Modulus.....510,000 psi
 Heat Deflection Temperature.....124°F
 Elongation %.....4.1%

2090 EPOXY SYSTEMS

Section 1: Description

2090 is the lowest viscosity epoxy system. If you are seeking high flexibility and very low viscosity, this would be the system for you. Application would be for very large parts requiring really low viscosity to ease flow of epoxy.

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

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	VISCOSITY (Cp)
2090 RESIN	1.12 kg/litre	560
3100 XSLOW HARDENER	.95 kg/litre	17.4
3100 SLOWISH HARDENER	.95 kg/litre	14.8
3100 SLOW HARDENER	.96 kg/litre	11.8
3100 MEDIUM HARDENER	.97 kg/litre	12.4
3100 FAST HARDENER	1.0 kg/litre	14.0

CURING CHARACTERISTICS	XSLOW	SLOWISH	SLOW	MEDIUM	FAST
GEL TIME (150g mix @77F)	90 min	60 min	40 min	30 min	20 min
THIN FILM SET (@77F)	14 hrs	10 hrs	5 hrs	3.5 hrs	2.5 hrs
PEAK EXOTHERM (100g mix @77F)	155 F	165 F	188 F	192 F	196 F
FINAL CURE	7 DAYS	7 DAYS	7 DAYS	7 DAYS	7 DAYS

Section 3: Typical Cured Properties

Barcol Hardness82
 Compression Yield.....13,500 psi
 Tensile Strength10,400 psi
 Tensile Modulus.....415,000 psi
 Flexural Strength.....15,300 psi
 Flexural Modulus.....475,000 psi
 Heat Deflection Temperature.....119°F
 Elongation %.....5.6%