

2000/2020 EPOXY SYSTEMS

Section 1: Description

Versatile, easy to use, low vapor, excellent UV stability, excellent clarity, we've been making this incomparable epoxy system for over 40 years and it still provides the basis of our business.

Primarily a hand layup and coating resin this stuff has been used in a myriad of applications since its inception.

2000 - 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.

2020 - General - Excellent balance of stiffness and impact strength, the "go to" for most applications.

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

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 2 parts resin : 1 part hardener

Mix ratio by weight 100 resin : 44 hardener

Recommended epoxy working temperature 80°F

MATERIAL CHARACTERISTICS	DENSITY (kg/litre)	VISCOSITY (CPS)
2000 RESIN	1.15	1800
2020 RESIN	1.14	1000
2100 XSLOW HARDENER	.98	16
2100 SLOW HARDENER	1.00	15
2100 MEDIUM HARDENER	1.00	15
2100 FAST HARDENER	1.01	14
2100 XFAST HARDENER	1.00	15

CURING CHARACTERISTICS	XSLOW	SLOW	MEDIUM	FAST	XFAST
POT LIFE (100 grams @77F)	180 min	40 min	25 min	17 min	12 min
POT LIFE (500mL @77F)	130 min	32 min	22 min	15 min	9 min
THIN FILM SET (@77F)	10 hrs	4 hrs	3 hrs	2 hrs	1.5 hrs
PEAK EXOTHERM (100g mix @77F)	220 F	287 F	293 F	300 F	307 F
FINAL CURE	7 DAYS	7 DAYS	7 DAYS	7 DAYS	7 DAYS

Section 3: Typical Cured Properties

2000 System

Barcol Hardness	83
Compression Yield.....	15,400 psi
Tensile Strength	10,300 psi
Tensile Modulus.....	405,000 psi
Flexural Strength.....	14,800 psi
Flexural Modulus.....	480,000 psi
Heat Deflection Temperature.....	122°F
Elongation %.....	3.8%

2020 System

Barcol Hardness	82
Compression Yield.....	13,500 psi
Tensile Strength	9,800 psi
Tensile Modulus.....	395,000 psi
Flexural Strength.....	14,800 psi
Flexural Modulus.....	455,000 psi
Heat Deflection Temperature.....	117°F
Elongation %.....	5.1%

2040 EPOXY SYSTEMS

Section 1: Description

Versatile, easy to use, low vapor, excellent UV stability, excellent clarity, we've been making this incomparable epoxy system for over 40 years and it still provides the basis of our business.

Primarily a hand layup and coating resin this stuff has been used in a myriad of applications since its inception.

2040 - 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

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 2 parts resin : 1 part hardener

Mix ratio by weight 100 resin : 44 hardener

Recommended epoxy working temperature 80°F

MATERIAL CHARACTERISTICS	DENSITY (kg/litre)	VISCOSITY (CPS)
2040 RESIN	1.14	600
2100 XSLow HARDENER	.98	16
2100 SLOW HARDENER	1.00	15
2100 MEDIUM HARDENER	1.00	15
2100 FAST HARDENER	1.01	14
2100 XFAST HARDENER	1.00	15

CURING CHARACTERISTICS	XSLow	SLOW	MEDIUM	FAST	XFAST
POT LIFE (100 grams @77F)	75 min	30 min	20 min	15 min	9 min
POT LIFE (500mL @77F)	70 min	25 min	16 min	11 min	8 min
THIN FILM SET (@77F)	7.5 hrs	3.5 hrs	2.0 hrs	1.5 hrs	1.0 hrs
PEAK EXOTHERM (100g mix @77F)	243 F	295 F	293 F	305 F	317 F
FINAL CURE	7 DAYS	7 DAYS	7 DAYS	7 DAYS	7 DAYS

Section 3: Typical Cured Properties

Barcol Hardness82
 Compression Yield.....11,700 psi
 Tensile Strength9,300 psi
 Tensile Modulus.....380,000 psi
 Flexural Strength.....14,900 psi
 Flexural Modulus.....380,000 psi
 Heat Deflection Temperature.....115°F
 Elongation %.....6.5%