

RP 3209-1 R/H

MASS CASTING SYSTEM

EPOXY IRON-OXIDE FILLED THIN SECTION CASTING

Ren[®] RP 3209-1 resin and hardener is a general purpose, black, filled epoxy resin suitable for castings up to two inches thick when cast in non-conducting molds. It can be cast up to six inches thick against metal. RP 3209-1 R/H system cures at room temperature and offers a long gel time and good resistance to high humidity conditions. This system is useful for mass casting at temperatures to 159°F (71°C).

MIX RATIO

	By Weight:	By Volume:
Resin to Hardener	100 to 10	100 to 25

TYPICAL HANDLING PROPERTIES*

	<u>ASTM Method</u>	<u>Resin</u>	<u>Hardener</u>	<u>Mixed</u>
Color	Visual	Black	Black	Black
Specific Gravity	D-1963	2.45–2.61	0.95–1.02	
Viscosity, cP	D-2393	39,000	3,300	15,000
Gel Time, 4 fl. oz, minutes	D-2471			90

NOTE: These physical properties are reported as typical test values obtained by our test laboratory. If assistance is needed in establishing product specifications, please consult with our Product Management Department.

RECOMMENDED CURE SCHEDULE

1. 77°F (25°C) at 7 days

TYPICAL CURED PROPERTIES*

	<u>ASTM Method</u>	<u>Cure Value</u>
Density, lb./ft ³ (g/cm ³)	D-792	127 (2.04)
Cubic Inch per Pound	D-792	13.6
Hardness, Shore D	D-2240	75
Ultimate Flexural Strength, psi	D-790	8,400
Flexural Modulus, psi	D-790	1,000,000
Ultimate Tensile Strength, psi	D-638	5,500
Tg by DMA, E", °F(°C)	D-4065	160 (71)
Deflection Temperature, °F(°C)	D-648	163 (73)
Ultimate Compressive Strength, psi	D-695	16,500
Coefficient of Thermal Expansion	D-3386	
		-22 to 86°F, in/in/°F
		-30 to 30°C, in/in/°C
Linear Shrinkage, in/in**	D-2566	26.0 x 10 ⁻⁶ 46.8 x 10 ⁻⁶ 0.005

* Tested @ 77°F (25°C) unless otherwise noted.

** Molds are half round steel, 10 inches long, 2.250 inches deep

SAFETY: Do not use or handle this product until the Material Safety Data Sheet has been read and understood.

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