

RP 4036 RESIN

RP 1511 HARDENER

HIGH-TEMPERATURE ALUMINUM FILLED CASTING SYSTEM

Ren[®] RP 4036 resin with RP 1511 hardener is a non-MDA, MPDA, VCHD aluminum-filled epoxy casting system intended for use to 300°F (149°C). Intermittent use to 350°F (177°C) is possible. RP 4036 resin with RP 1511 hardener can be cast to 4" thick in nonconductive molds and 6" thick in conductive molds.

MIX RATIO

	By Weight:	By Volume:
Resin to Hardener	100 to 13	100 to 22

TYPICAL HANDLING PROPERTIES*

	<u>ASTM Method</u>	<u>Resin</u>	<u>Hardener</u>	<u>Mixed</u>
Color	Visual	Gray	Brown	Gray
Specific Gravity	D-1963	1.66–1.76	1.01–1.03	
Viscosity, cP	D-2393	39,600	400–700	15,000
Gel Time, 14 fl. oz, minutes	D-2471			140

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 24 hours,	plus
200°F (93°C) at 2 hours,	plus
250°F (121°C) at 2 hours,	plus
300°F (149°C) at 2 hours	plus
350°F (177°C) at 2 hours	

TYPICAL CURED PROPERTIES*

	<u>ASTM Method</u>	<u>Cure Value</u>
Density, lb./ft ³ (g/cm ³)	D-792	(1.58)
Cubic Inch per Pound	D-792	17.6
Hardness, Shore D	D-2240	91
Ultimate Flexural Strength, psi	D-790	9,300
Flexural Modulus, psi	D-790	930,000
Ultimate Tensile Strength, psi	D-638	6,300
Tg by DMA, E", °F(°C)	D-4065	350 (177)
Ultimate Compressive Strength, psi	D-695	25,800
Coefficient of Thermal Expansion	D-3386	
	86 to 212°F, in/in/°F	22.5 x 10 ⁻⁶
	30 to 100°C, in/in/°C	40.5 x 10 ⁻⁶
Linear Shrinkage, in/in	D-2566	0.005

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

** Molds are half round steel, 10 inches long, 4.250 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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