

Parts-In-Minutes®

RP 6460 R/H

HIGH-HEAT RAPID SET / RAPID DEMOLD

MEDIUM FLEXURAL MODULUS PROTOTYPE SYSTEM FOR MACHINE DISPENSING

Ren® RP 6460 resin and hardener is an extremely fast setting, machine dispensable, polyurethane casting system for production of prototype parts. The cured castings exhibit thermoplastic-like properties including very high impact resistance, thermal resistance, and dimensional stability. RP 6460 R/H offers rapid part production with extremely fast demold time (up to 6 parts per hour depending upon part configuration). When this fast setting polyurethane system is combined with meter-mix dispensing equipment, parts up to 10 pounds can be efficiently cycled in 15–30 minutes.

MIX RATIO

Resin to Hardener	By Weight: 80 to 100	By Volume: 67 to 100
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TYPICAL HANDLING PROPERTIES*

	<u>ASTM Method</u>	<u>Resin</u>	<u>Hardener</u>	<u>Mixed</u>
Color	Visual	Dark brown	Cream	Buff
Specific Gravity	D-1963	1.20	1.05	
Viscosity, cP	D-2393	170	1,500	
Gel Time, 150g, seconds	D-2471			45–65

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 SCHEDULES

1. 77°F (25°C) at 7 days
2. 77°F (25°C) at 24 hours, plus
176°F (80°C) at 4 hours, plus
248°F (120°C) at 2 hours

TYPICAL CURED PROPERTIES*

	<u>ASTM Method</u>	<u>Cure 1 Value</u>	<u>Cure 2 Value</u>
Density, lb./ft ³ (g/cm ³)	D-792	73 (1.18)	73 (1.17)
Cubic Inch per Pound		23.5	23.7
Hardness, Shore D	D-2240	80	80
Flexural Strength, at 5% strain, psi	D-790	7,100	7,000
Flexural Modulus, psi	D-790	174,000	181,000
Ultimate Tensile Strength, psi	D-638	5,300	5,400
Tensile Modulus, psi	D-638	176,000	176,000
% Elongation	D-638	8	8
Tg by DMA, E", °F(°C)	D-4065	320 (160)	332 (167)
Deflection Temperature, °F(°C) 66 psi	D-648	275 (135)	182 (139)
264 psi		232 (111)	259 (126)
Ultimate Compressive Strength, psi	D-695	24,500	26,400
Compressive Modulus, psi	D-695	175,000	172,000
Izod Impact, notched, ft-lb./in	D-256	1.0	1.1
Coefficient of Thermal Expansion	D-3386		
-22 to 86°F, in/in/°F		69 x 10 ⁻⁶	70 x 10 ⁻⁶
-30 to 30°C, in/in/°C		124 x 10 ⁻⁶	126 x 10 ⁻⁶

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

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

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