

RP 6456 R/H

SHORE 72D / RAPID DEMOLD

MEDIUM FLEXURAL MODULUS PROTOTYPE SYSTEM FOR MACHINE DISPENSING

Ren® RP 6456 resin and hardener is formulated to rapidly produce prototype parts from low-cost tooling. This system can be cast into molds made from silicone, polyurethane, or epoxy. Cured parts have the look and feel of thermoplastic. The parts have good thermal resistance and dimensional stability. RP 6456 R/H permits demolding in 15 to 30 minutes, depending on configuration. This system is best suited for use with meter-mix dispensing equipment.

MIX RATIO

Resin to Hardener	By Weight: 60 to 100	By Volume: 50 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 or Black	Buff or Black
Specific Gravity	D-1963	1.20	1.03	
Viscosity, cP	D-2393	170	1,600	
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 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	71 (1.15)
Cubic Inch per Pound		24.1
Hardness, Shore D	D-2240	70
Flexural Strength, 5% strain, psi	D-790	5,700
Flexural Modulus, psi	D-790	148,000
Ultimate Tensile Strength, psi	D-638	3,500
Tensile Modulus, psi	D-638	146,000
% Elongation	D-638	6
Tg by DMA, E", °F(°C)	D-4065	270 (132)
Deflection Temperature, °F(°C)	D-648	210 (99)
	66 psi	190 (88)
	264 psi	142,000
Ultimate Compressive Strength, psi	D-695	8,700
Compressive Modulus, psi	D-695	142,000
Izod Impact, notched, ft-lb./in	D-256	0.7
Coefficient of Thermal Expansion	D-3386	
	-22 to 86°F, in/in/°F	77 x 10 ⁻⁶
	-30 to 30°C, in/in/°C	139 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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