

# Ren:C:O-Thane<sup>®</sup>

## Polyurethanes

# RP 6420 R/H

## A TOUGH, RIGID POLYURETHANE ELASTOMER

Ren<sup>®</sup> RP 6420 resin and hardener is a patented, clear, two-component casting polyurethane elastomer ideal for prototypes and rigid parts. RP 6420 R/H cures to a tough, rigid material without containing MOCA or TDI. RP 6420 R/H is easily mixed, reproduces fine detail with a minimum of air entrapment, and cures at room temperature. RP 6420 R/H must be vacuum-degassed for bubble-free parts.

### MIX RATIO

	By Weight:	By Volume:
Resin to Hardener	100 to 100	95 to 100

### TYPICAL HANDLING PROPERTIES\*

	<u>ASTM Method</u>	<u>Resin</u>	<u>Hardener</u>	<u>Mixed</u>
Color	Visual	Clear	Clear	Clear
Specific Gravity	D-1963	1.08	1.04	
Viscosity, cP	D-2393	200	1,200–1,400	1,200
Gel Time, 150g, minutes	D-2471			30

**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 16 hours

### TYPICAL CURED PROPERTIES\*

	<u>ASTM Method</u>	<u>Cure 1 Value</u>	<u>Cure 2 Value</u>
Density, lb./ft <sup>3</sup> (g/cm <sup>3</sup> )	D-792	69 (1.10)	69 (1.10)
Cubic Inch per Pound		25.2	25.2
Hardness, Shore D	D-2240	77 ± 7	77 ± 7
Ultimate Flexural Strength, psi	D-790	6,100	5,500
Ultimate Tensile Strength, psi	D-638	4,700	5,200
% Elongation	D-638	50	40
Deflection Temperature, °F(°C)264 psi	D-648	129 (54)	155 (68)
Compressive Strength, 2% offset, psi	D-695	3,900	4,100
Izod Impact, notched, ft-lb./in	D-256	1.30	1.50
Tear Strength, ppi	D-624	500	275
Linear Shrinkage, in/in**	D-2566	0.002	0.003

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

\*\* Molds are half round steel, 10 inches long, 0.875 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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