

Ren:C:O-Thane[®]

Polyurethanes

RP 6405 R/H

A RIGID, HIGH-STRENGTH SHORE 75±5 D ELASTOMER

Ren[®] RP 6405 resin and hardener is a low-viscosity, white, two-component casting elastomer ideal for prototypes and rigid parts. RP 6405 R/H cures to a tough, tear-resistant, rigid material without containing MOCA and TDI. RP 6405 R/H is easily mixed and reproduces fine detail with a minimum of air entrapment and cures at room temperature.

MIX RATIO

Resin to Hardener	By Weight:	By Volume:
	100 to 100	90 to 100

TYPICAL HANDLING PROPERTIES*

	<u>ASTM Method</u>	<u>Resin</u>	<u>Hardener</u>	<u>Mixed</u>
Color	Visual	Amber	White	White
Specific Gravity	D-1963	1.13	1.03	
Viscosity, cP	D-2393	40–50	800–900	240
Gel Time, 150g, minutes	D-2471			20

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 ³ (g/cm ³)	D-792	67 (1.07)	67 (1.07)
Cubic Inch per Pound		25.9	25.9
Hardness, Shore D	D-2240	75 ± 5	75 ± 5
Ultimate Flexural Strength, psi	D-790	6,870	8,580
Ultimate Tensile Strength, psi	D-638	5,300	5,500
% Elongation	D-638	13.3	10
Deflection Temperature, °F(°C)	D-648	124 (51)	146 (63)
Compressive Strength, at yield, psi	D-695	6,500	7,000
Izod Impact, notched, ft-lb./in	D-256	0.71	0.55
Coefficient of Thermal Expansion	D-3386		
-22° to 86°F, in/in/°F		58 x 10 ⁻⁶	56 x 10 ⁻⁶
-30 to 30°C, in/in/°C		104 x 10 ⁻⁶	101 x 10 ⁻⁶
Tear Strength, ppi	D-624	300	350
Linear Shrinkage, in/in**	D-2566	0.0029	0.0055

* 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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