

Ren:C:O-Thane[®]

Polyurethanes

RP 6430 R/H

A RIGID, HIGH-STRENGTH SHORE 75 ± 3D ELASTOMER

Ren[®] RP 6430 resin and hardener is a liquid, two-component polyurethane system that produces tough, rigid castings. RP 6430 R/H contains special moisture-scavengers that assist in reducing voids in castings. Castings of RP 6430 R/H can be pigmented using Ren coloring pastes.

MIX RATIO

	By Weight:	By Volume:
Resin to Hardener	100 to 50	100 to 52

TYPICAL HANDLING PROPERTIES*

	<u>ASTM Method</u>	<u>Resin</u>	<u>Hardener</u>	<u>Mixed</u>
Color	Visual	Amber	White	Off-White
Specific Gravity	D-1963	1.10	1.06	
Viscosity, cP	D-2393	50	1,100	200
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	71 (1.14)	71 (1.14)
Cubic Inch per Pound		24.3	24.3
Hardness, Shore D	D-2240	75 ± 3	75 ± 3
Ultimate Flexural Strength, psi	D-790	9,600	10,700
Flexural Modulus, psi	D-790	271,000	254,000
Ultimate Tensile Strength, psi	D-638	5,900	6700
% Elongation	D-638	13	11
Tg by DMA, E", °F(°C)	D-4065	161 (72)	204 (96)
Deflection Temperature, °F(°C) 66 psi	D-648	131 (55)	170 (77)
264 psi		127 (53)	160 (71)
Ultimate Compressive Strength, psi	D-695	6,400	13,000
Compressive Modulus, psi	D-695	222,000	217,000
Izod Impact, notched, ft-lb./in	D-256	0.61	0.57
Coefficient of Thermal Expansion	D-3386		
-22° to 86°F, in/in/°F		58 x 10 ⁻⁶	57 x 10 ⁻⁶
-30 to 30°C, in/in/°C		104 x 10 ⁻⁶	103 x 10 ⁻⁶
Tear Strength, ppi	D-624	420	400
Linear Shrinkage, in/in**	D-2566	0.002	0.005

* 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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