



Rapid Cast™

Product Name

RC-850 Polyurethane



Description

RC-850 is a tough, impact resistant elastomer formulated for room temperature meter-mix dispensing systems and short mold cycle times. Excellent physical properties can be obtained with a room temperature cure without the utilization of mercury, MOCA, or TDI.

Physical Properties

Mix Ratio	Resin:Hardener (parts by weight)		100:86	
Mix Ratio	Resin:Hardener (parts by volume)		100:100	
Viscosity (cps@77°F)	Resin	100	Gel Time	80 ± 10 Seconds
	Hardener	1500	Demold Time	25 ± 5 Minutes
	Mixed	375	Color	White
Specific Gravity (g/cc)	Resin	1.20		
	Hardener	1.05		

Cure 1 ▶ 24 hours at 77°F
Cure 2 ▶ 7 days at 77°F

Cured Properties

	Method	Cure 1	Cure 2
Hardness (shore D)	ASTM D-2240	65 ± 5	70 ± 5
Tensile Strength (psi)	ASTM D-638	4,000	6,500
Elongation at Break	ASTM D-638	15%	8%
Compression Strength (psi)	ASTM D-695	5,800	8,000
Compression Modulus (psi)	ASTM D-695	250,000	450,000
Ultimate Flex Strength (psi)	ASTM D-790	6,000	9,000
Flexural Modulus (psi)	ASTM D-790	180,000	240,000
Notched Izod (ft.lbs./in.)	ASTM D-256	0.7	0.7
Linear Shrink (in./in.)	ASTM D-2566	N/A	N/A
Heat Deflection Temp. (66psi)	ASTM D-648	70°C / 158°F	75°C / 167°F
Heat Deflection Temp. (264psi)	ASTM D-648	65°C / 150°F	70°C / 158°F
Specific Gravity (g/cc)		1.10	1.10

Processing Notes

RC-850 can be used at room temperature. Meter-mix equipment is recommended due to the short working-life of the formulation.

Agitate the hardener and resin before use to ensure that the formula is homogeneous.

Safety and Handling

DO NOT USE UNTIL MSDS HAVE BEEN READ AND UNDERSTOOD. Store containers in a dry location. Partially used containers should be blanketed with dry nitrogen to prevent moisture contamination. Moisture will react with the resin component, creating carbon dioxide gas and a possible pressure increase in the container.

SPECIFICATION WRITERS: The above values are meant to represent typical properties only. Users are encouraged to qualify products in their own laboratories prior to specification publication.

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