



Rapid Cast™

Product Name

RC-555 Polyurethane



Description

RC-555 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)		100:88	
Mix Ratio	Resin:Hardener (parts by volume)		100:100	
Viscosity (cps@77°F)	Resin	100	Gel Time	70 ± 10 Seconds
	Hardener	1200	Demold Time	12.5 ± 2.5 Minutes
	Mixed	500	Color	Black
Specific Gravity (g/cc)	Resin	1.26		
	Hardener	1.10		

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	75 ± 5	80 ± 5
Tensile Strength (psi)	ASTM D-638	4,700	6,500
Elongation at Break	ASTM D-638	9%	9%
Compression Strength (psi)	ASTM D-695	N/A	N/A
Compression Modulus (psi)	ASTM D-695	N/A	N/A
Ultimate Flex Strength (psi)	ASTM D-790	7,500	9,700
Flexural Modulus (psi)	ASTM D-790	185,000	210,000
Notched Izod (ft.lbs./in.)	ASTM D-256	1.1	1.1
Linear Shrink (in./in.)	ASTM D-2566	N/A	N/A
Heat Deflection Temp. (66psi)	ASTM D-648	N/A	N/A
Heat Deflection Temp. (264psi)	ASTM D-648	90°C / 194°F	90°C / 194°F
Specific Gravity (g/cc)		1.14	1.14

Processing Notes

RC-555 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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