



Rapid Cast™

Product Name

RC-250 Polyurethane



Description

RC-250 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, MOC, 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	180	Gel Time	50 ± 10 Seconds
	Hardener	2200	Demold Time	22.5 ± 7.5 Minutes
	Mixed	600	Color	Black
Specific Gravity (g/cc)	Resin	1.26		
	Hardener	1.08		

Cure 1 ▶ 24 hours at 77°F + 16 hours at 200°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	7,000	7,000
Elongation at Break	ASTM D-638	18%	10%
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	9,000	10,000
Flexural Modulus (psi)	ASTM D-790	200,000	235,000
Notched Izod (ft.lbs/in.)	ASTM D-256	1.5	1.5
Linear Shrink (in./in.)	ASTM D-2566	N/A	N/A
Heat Deflection Temp. (66psi)	ASTM D-648	125°C / 257°F	100°C / 212°F
Heat Deflection Temp. (264psi)	ASTM D-648	110°C / 230°F	83°C / 182°F
Specific Gravity (g/cc)		1.14	1.14

Processing Notes

RC-250 can be used at room temperature. Meter-mix equipment is recommended due to the short working-life of the formulation. Black pigment has been added to the hardener component and may separate during storage.

Agitate hardener before mixing 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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