



Rapid Cast™

Product Name

RC-72DC Polyurethane



Description

RC-72DC is a tough, impact resistant elastomer formulated for meter-mix, hand-batch, or vacuum-assisted casting methods. Excellent physical properties can be obtained with a room temperature cure without the utilization of mercury, MOCA, or TDI. The unique chemistry of RC-72CD imparts excellent optical clarity as well as U.V. stability.

Physical Properties

Mix Ratio	Resin:Hardener (parts by weight)	100:46		
Mix Ratio	Resin:Hardener (parts by volume)	100:50		
Viscosity (cps@100°F)	Resin	900	Gel Time	5 ± 1 Minutes
	Hardener	4000	Demold Time*	1.5 ± .5 Hours
	Mixed	1200	Color	Water Clear
Specific Gravity (g/cc)	Resin	1.16	* Demold time is always mass dependant	
	Hardener	1.06		

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	75 ± 5
Tensile Strength (psi)	ASTM D-638	7,000	10,000
Elongation at Break	ASTM D-638	5%	2%
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	13,000	15,000
Flexural Modulus (psi)	ASTM D-790	285,000	375,000
Notched Izod (ft.lbs./in.)	ASTM D-256	N/A	N/A
Linear Shrink (in./in.)	ASTM D-2566	0.004	0.006
Heat Deflection Temp. (66psi)	ASTM D-648	60°C / 140°F	63°C / 145°F
8 hour @ 150°F post-cure (66 psi)	ASTM D-648	77°C / 170°F	77°C / 171°F
Specific Gravity (g/cc)		1.1	1.1

Processing Notes

Formulated for meter-mix, hand-batch, vacuum assisted casting equipment. For best results, de-air the material prior to casting, then pressurize to 60 psi until cured. RC-72DC can be easily buffed when cured.

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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