



Product Name

VA-1800 Polyurethane

Description

VA-1800 is an 80 shore A elastomer formulated for hand-batch or vacuum assisted processing. Excellent physical properties can be obtained with a room temperature cure without the utilization of mercury, MOCA, or TDI. VA-1800 has excellent green strength for quick demold times

Physical Properties

Mix Ratio	Resin:Hardener (parts by weight)	80:100		
Mix Ratio	Resin:Hardener (parts by volume)	75:100		
Viscosity (cps@77°F)	Resin	8500	Gel Time	5 ± 1 Minutes
	Hardener	550	Demold Time*	45 ± 15 Minutes
	Mixed	1750	Color	Off White
Specific Gravity (g/cc)	Resin	1.21	* Demold time is always mass dependant	
	Hardener	1.14		

Cure 1 ► 24 hours at 77°F + 1 hour at 150°F
Cure 2 ► 7 days at 77°F

Cured Properties

	Method	Cure 1	Cure 2
Hardness (shore A)	ASTM D-2240	75 ± 5	75 ± 5
Tensile Strength (psi)	ASTM D-638	900	NA
Elongation at Break	ASTM D-638	100%	NA
Tear Strength (pli)	ASTM D-624	80	NA
Linear Shrink (in./in.)	ASTM D-2566	0.005	0.005
Specific Gravity (g/cc)		1.12	1.12

Processing Notes

For best results, de-air the material prior to casting, then pressurize to 60 psi until cured. If pigment has been added to the hardener component, it will 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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