



Date Issued Jan 24, 2008

Durez 791 Black Phenolic is a two-stage, general purpose molding material. It exhibits a balance of mechanical and electrical properties plus versatile moldability which account for its widespread use on many diverse applications. Durez 791 Black is an "industrial standard" for GP phenolic molding materials.

Plasticities available for compression and transfer molding.

Form of Material Granular

Feeding & Preforming Good

Storage Life One Year

PHENOLIC

Typical Properties		Compression		Injection Grade	
		International Units	English Units	International Units	English Units
Physical	Specific Gravity (D792)	1.36	1.36		
	Apparent Density (D1895)	0.58 g/cc	0.58 g/cc	0.58 g/cc	0.58 g/cc
	Molding Shrinkage* (D6289)	0.008 m/m	0.008 in/in	m/m	in/in
	Water Absorption (D570)	0.70 %	0.70 %	%	%
Mechanical	Tensile Strength (D638)	48 Mpa	7,000 psi	Mpa	psi
	Flexural Strength (D790)	76 Mpa	11,000 psi	Mpa	psi
	Compressive Strength (D695)	220 Mpa	32,000 psi	Mpa	psi
	Tensile Modulus (D638)	9.0 Gpa	1.3 x10 ⁶ psi	Gpa	x10 ⁶ psi
	Izod Impact (D256)	17.1 J/m	0.32 ft lb/in	J/m	ft lb/in
Thermal	Deflection Temperature (D648)	166 °C	330 °F	°C	°F
	UL Flammability (UL-94) @	1.5 mm	HB	1.5 mm	HB
	For complete UL Listing for this material refer to the UL web Site www.ul.com	3.0 mm	HB	3.0 mm	HB
		6.0 mm	V - 0	6.0 mm	V - 0
	UL Temperature Index (Elect) @	3.0 mm	150 °C		150 °C
Electrical	Dielectric Strength (D149)				
	Short Time	13.8 MV/m	350 V/mil	MV/m	V/mil
	Step by Step	10.8 MV/m	275 V/mil	MV/m	V/mil
	Dissipation Factor (D150)1 MHZ	.03	.03		
	Dielectric Constant (D150)1 MHZ	4.6	4.6		
Volume Resistivity(ohms)(D257)	1.0 x10 ¹⁰ m	1.0 x10 ¹² cm	x10 ¹⁰ m	x10 ¹² cm	

Properties determined with test specimens molded at 340-350°F *Typical transfer-molded shrinkage is 0.010 in/in or m/m

Other Properties

IMPORTANT! The information presented herein, while not guaranteed, was prepared by technical personnel and is true and accurate to the best of our knowledge. No warranty or guaranty, expressed or implied is made regarding performance stability or otherwise. This information is not intended to be all inclusive as the manner and conditions of use, handling, storage, and other factors may involve other or additional safety or performance considerations. While our technical personnel will be happy to respond to questions regarding safe handling and use procedures, safe handling and use remains the responsibility of the customer. No suggestions for use are intended as and nothing herein shall be construed as a recommendation to infringe any existing patents or violate any Federal, State or local laws.