



Date Issued Jan 24, 2008

Durez 156 Black Phenolic is a two-stage, heat resistant/electrical molding material. It exhibits excellent dimensional stability, high heat resistance, excellent molded appearance, and UL flammability rating. Typical applications include automotive carburetor spacers, sealing rings, thrust washers, speedometer sleeves, appliance terminals, probe controls, insulators, light baffles, etc.

Plasticities available for compression, transfer, and injection 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)	1.58	1.58	1.54	1.54
	Apparent Density (D1895)	0.65 g/cc	0.65 g/cc	0.65 g/cc	0.65 g/cc
	Molding Shrinkage* (D6289)	0.004 m/m	0.004 in/in	0.0080 m/m	0.0080 in/in
	Water Absorption (D570)	0.30 %	0.30 %	0.30 %	0.30 %
Mechanical	Tensile Strength (D638)	41 Mpa	6,000 psi	52 Mpa	7,500 psi
	Flexural Strength (D790)	72 Mpa	10,500 psi	83 Mpa	12,000 psi
	Compressive Strength (D695)	196 Mpa	28,500 psi	193 Mpa	28,000 psi
	Tensile Modulus (D638)	10.3 Gpa	1.5 x10 ⁶ psi	10.3 Gpa	1.5 x10 ⁶ psi
	Izod Impact (D256)	18.1 J/m	0.34 ft lb/in	16.0 J/m	0.30 ft lb/in
Thermal	Deflection Temperature (D648)	191 °C	375 °F	191 °C	375 °F
	UL Flammability (UL-94) @	0.51 mm	V - 1	0.51 mm	V - 1
	For complete UL Listing for this material refer to the UL web Site www.ul.com	1.5 mm	V - 0	1.5 mm	V - 0
	UL Temperature Index (Elect) @	1.5 mm	5VA	1.5 mm	5VA
Electrical	Dielectric Strength (D149)				
	Short Time	11.8 MV/m	300 V/mil	13.8 MV/m	350 V/mil
	Step by Step	10.8 MV/m	275 V/mil	11.8 MV/m	300 V/mil
	Dissipation Factor (D150)1 MHZ	.05	.05	.05	.05
	Dielectric Constant (D150)1 MHZ	5.0	5.0	5.5	5.5
	Volume Resistivity(ohms)(D257)	1.0 x10 ¹⁰ m	1.0 x10 ¹² cm	1.0 x10 ¹⁰ m	1.0 x10 ¹² cm

Properties determined with test specimens molded at 340-350°F *Typical transfer-molded shrinkage is 0.006 in/in or m/m

Other Properties

IEC Tracking Index (CTI): 180 V.

ASTM D-495 Arc Resistance: 180 sec.

Durez 156 is Fungus Resistant per Mil-E-5272C.

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