



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.

Revision Date Jan 17, 2017

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.

RoHS2 (2011/65/EU) Compliant
 REACH (EC 1907/2006) SVHC / Annex XIV Compliant
 HR4173 Sec.1502 Conflict Materials Compliant
 Halogen Free

Shelf life- Minimum one year at typical ambient conditions.

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