



Date Issued Jan 24, 2008

Durez 152 Phenolic is a two-stage, heat resistant/ electrical molding material. It exhibits superior dimensional stability, good strength retention at elevated temperature and good molded appearance and machinability which account for it's widespread use on electrical, telecommunication and appliance applications.

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)	1.50	1.50	1.50	1.50
	Apparent Density (D1895)	0.68 g/cc	0.68 g/cc	0.68 g/cc	0.68 g/cc
	Molding Shrinkage* (D6289)	0.006 m/m	0.006 in/in	0.0100 m/m	0.0100 in/in
	Water Absorption (D570)	0.30 %	0.30 %	0.30 %	0.30 %
Mechanical	Tensile Strength (D638)	48 Mpa	7,000 psi	62 Mpa	9,000 psi
	Flexural Strength (D790)	76 Mpa	11,000 psi	83 Mpa	12,000 psi
	Compressive Strength (D695)	207 Mpa	30,000 psi	207 Mpa	30,000 psi
	Tensile Modulus (D638)	9.6 Gpa	1.4 x10 ⁶ psi	9.0 Gpa	1.3 x10 ⁶ psi
	Izod Impact (D256)	16.0 J/m	0.30 ft lb/in	14.9 J/m	0.28 ft lb/in
Thermal	Deflection Temperature (D648)	191 °C	375 °F	191 °C	375 °F
	UL Flammability (UL-94) @	1.5 mm	V - 1	1.5 mm	V - 1
	For complete UL Listing for this material refer to the UL web Site www.ul.com	3.0 mm	V - 0	3.0 mm	V - 0
	UL Temperature Index (Elect) @	6.0 mm	V - 0	6.0 mm	V - 0
Electrical	Dielectric Strength (D149)				
	Short Time	14.7 MV/m	375 V/mil	13.8 MV/m	350 V/mil
	Step by Step	12.8 MV/m	325 V/mil	10.8 MV/m	275 V/mil
	Dissipation Factor (D150)1 MHZ	.05	.05	.05	.05
	Dielectric Constant (D150)1 MHZ	5.0	5.0	5.2	5.2
	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 0.008 in/in or m/m

Other Properties

IEC Tracking index (CTI): 190 V.

Durez 152 is Fungus resistant per Mil-I-631D and Mil-E-5272C.

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