



Durez 31735 is a special purpose phenolic molding compound developed for automotive and industrial pulleys. This material is designed to optimize pulley performance relating to belt life, dimensional tolerance, impact strength, and other properties required in pulley applications.

Revision Date Jul 10, 2017

Plasticities available for compression and transfer molding.

Form of Material Granular Feeding & Preforming Fair Storage Life One Year

PHENOLIC

Typical Properties		Compression		Injection Grade	
		International Units	English Units	International Units	English Units
Physical	Specific Gravity (D792)	1.43	1.43	1.43	1.43
	Apparent Density (D1895)	0.55 g/cc	0.55 g/cc	0.55 g/cc	0.55 g/cc
	Molding Shrinkage* (D6289)	0.006 m/m	0.006 in/in	0.0090 m/m	0.0090 in/in
	Water Absorption (D570)	0.50 %	0.50 %	0.50 %	0.50 %
Mechanical	Tensile Strength (D638)	55 Mpa	8,000 psi	52 Mpa	7,500 psi
	Flexural Strength (D790)	83 Mpa	12,000 psi	86 Mpa	12,500 psi
	Compressive Strength (D695)	207 Mpa	30,000 psi	207 Mpa	30,000 psi
	Tensile Modulus (D638)	6.9 Gpa	1.0 x10 ⁶ psi	6.9 Gpa	1.0 x10 ⁶ psi
	Izod Impact (D256)	27.8 J/m	0.52 ft lb/in	21.4 J/m	0.40 ft lb/in
Thermal	Deflection Temperature (D648)	177 °C	350 °F	163 °C	325 °F
	UL Flammability (UL-94) @	mm		mm	
	For complete UL Listing for this material refer to the UL web Site www.ul.com	mm		mm	
	UL Temperature Index (Elect) @	3.0 mm	°C		°C
Electrical	Dielectric Strength (D149)				
	Short Time	10.8 MV/m	275 V/mil	12.8 MV/m	325 V/mil
	Step by Step	9.8 MV/m	250 V/mil	11.8 MV/m	300 V/mil
	Dissipation Factor (D150)1 MHZ	.05	.05	.05	.05
	Dielectric Constant (D150)1 MHZ	6.0	6.0	5.1	5.1
	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

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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