

Technical Data Sheet

Glastic 1608

Thermoset Polyester
LyondellBasell Industries
Engineering Plastics

Product Description

Grade 1608 is a very high-strength, general purpose, corrosion-resistant material. Recommended for compression molding only. UL® Recognized. Meets FDA requirements for food contact.

General

Filler / Reinforcement	• Glass Fiber		
Features	• Corrosion Resistant	• General Purpose	• High Strength
Uses	• Containers • Engineering Parts	• Pump Parts • Valves/Valve Parts	
Appearance	• Black	• Colors Available	• Tan
Forms	• BMC - Bulk Molding Compound		
Processing Method	• Compression Molding		

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity	1.78	1.78 g/cm³	ASTM D792
Water Absorption (24 Hr)	1.8 %	1.8 %	ASTM D570
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus (Compression Molded)	2.10E+6 psi	14500 MPa	ASTM D638
Tensile Strength (Yield, Compression Molded)	5540 psi	38.2 MPa	ASTM D638
Flexural Modulus (Compression Molded)	2.10E+6 psi	14500 MPa	ASTM D790
Flexural Strength (Compression Molded)	29200 psi	201 MPa	ASTM D790
Compressive Strength	35200 psi	243 MPa	ASTM D695
Shear Strength	11300 psi	77.6 MPa	ASTM D732
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact (Compression Molded)	9.8 ft·lb/in	520 J/m	ASTM D256
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
264 Psi (1.8 Mpa), Unannealed, Compression Molded	500 °F	260 °C	
Thermal Conductivity	1.8 Btu·in/hr/ft²/°F	0.26 W/m/K	ASTM C177
RTI Elec	130 °F	54.4 °C	UL 746B
RTI Str	130 °F	54.4 °C	UL 746B
Electrical	Nominal Value (English)	Nominal Value (SI)	Test Method
Surface Resistivity	• 1.5E+15 ohms • 8.3E+13	• 1.5E+15 ohms • 8.3E+13	ASTM D257
Dielectric Strength (Method A (short-time))	450 V/mil	18 kV/mm	ASTM D149
Dielectric Constant			ASTM D150
60 Hz	• 4.90 • 5.40	• 4.90 • 5.40	
1 Mhz	• 4.30 • 4.50	• 4.30 • 4.50	
Dissipation Factor			ASTM D150
60 Hz	• 5.0E-3 • 0.026	• 5.0E-3 • 0.026	
1 Mhz	• 8.0E-3 • 0.12	• 8.0E-3 • 0.12	
Arc Resistance	104 sec	104 sec	ASTM D495

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Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Flame Rating (0.06 In (1.6 Mm))	HB	HB	UL 94
Oxygen Index	22 %	22 %	ASTM D2863

Additional Information

Permittivity, ASTM D150, 60 Hz, Condition A: 4.9
Permittivity, ASTM D150, 60 Hz, Condition D: 5.4
Permittivity, ASTM D150, 1 MHz, Condition A: 4.3
Permittivity, ASTM D150, 1 MHz, Condition D: 4.5
Insulation Resistance, ASTM D257, Condition A: 150 Ohm x 10e13
Insulation Resistance, ASTM D257, Condition C: 8.3 Ohm x 10e13
Track Resistance, ASTM D2303: 105 minutes
Dissipation Factor, ASTM D150, 60 Hz, Condition A: 0.005
Dissipation Factor, ASTM D150, 60 Hz, Condition D: 0.026
Dissipation Factor, ASTM D150, 1 MHz, Condition A: 0.008
Dissipation Factor, ASTM D150, 1 MHz, Condition D: 0.115

Notes

These are typical property values not to be construed as specification limits.