

Technical Data Sheet

Premi-glas 8101

Thermoplastic Polyester
LyondellBasell Industries
Engineering Plastics

Product Description

Premi-Glas® 8101 is a fiberglass reinforced thermoset bulk molding compound for automotive forward lighting applications.

Key Features and Benefits:

- Excellent dimensional stability and heat resistance.
- Proven in high speed automated injection molding processes.
- Accepts UV-cure basecoats which are required prior to vacuum metallization.
- Meets the requirements of GMP.UP.014 and Ford WSB-M3D171-A1.
- Available in grey or black.

General

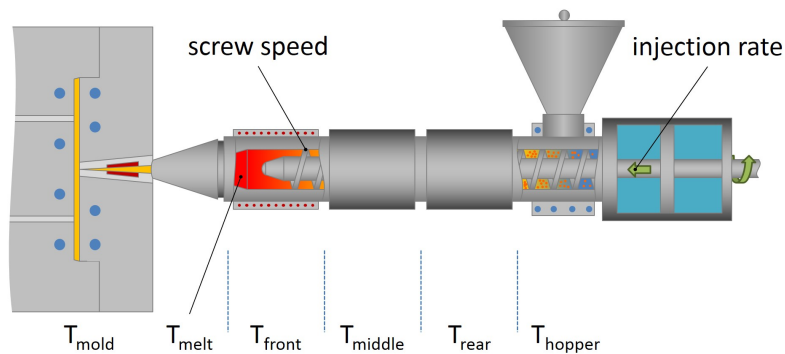
Filler / Reinforcement	• Glass Fiber		
Features	• Fast Molding Cycle	• Good Dimensional Stability	• High Heat Resistance
Uses	• Automotive Applications	• Lighting Fixtures	
Automotive Specifications	• GM GMP.UP.014 Color: 250116 • GM GMP.UP.014 Color: B (250121)	• GM GMP.UP.014 Color: C886-02 Black • GM GMP.UP.014 Color: CL21970 Gray	
Appearance	• Black	• Grey	
Forms	• BMC - Bulk Molding Compound		
Processing Method	• Injection Molding		

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity	1.79	1.79 g/cm ³	
Water Absorption (24 Hr)	0.10 %	0.10 %	ASTM D570
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus (Injection Molded)	1.60E+6 psi	11000 MPa	ASTM D638
Tensile Strength (Injection Molded)	4500 psi	31.0 MPa	ASTM D638
Flexural Modulus - Secant			ASTM D790
73°F (23°C), 0.0197 In (0.500 Mm), Injection Molded	1.50E+6 psi	10300 MPa	
302°F (150°C), 0.0197 In (0.500 Mm), Injection Molded	700000 psi	4830 MPa	
Flexural Strength (Injection Molded)	9500 psi	65.5 MPa	ASTM D790
Poisson's Ratio	0.30	0.30	
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact (Injection Molded)	0.80 ft·lb/in	43 J/m	ASTM D256
Unnotched Izod Impact (Injection Molded)	1.6 ft·lb/in	85 J/m	ASTM D4812
Thermal	Nominal Value (English)	Nominal Value (SI)	
CLTE			
Flow	1.4E-5 in/in/°F	2.5E-5 cm/cm/°C	
Transverse	2.2E-5 in/in/°F	4.0E-5 cm/cm/°C	
Thermal Conductivity	1.7 Btu·in/hr/ft ² /°F	0.25 W/m/K	

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Injection	Nominal Value (English)	Nominal Value (SI)
Mold Temperature	320 °F	160 °C
Injection Pressure	1000 psi	6.89 MPa

Notes

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