

Technical Data Sheet

Typical Application — Forward Lighting

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.

**Typical Values. Mechanical values are for Specimens cut from Injection-Molded panels.**

Properties	Test Method	Values (US)	Values (Metric)
Flexural Strength	ASTM D-790	9,500 psi	65 MPa
Flexural Modulus, secant, 0.5 mm, RT	ASTM D-790	1.5 x 10 <sup>6</sup> psi	10 GPa
Flexural Modulus, secant, 0.5 mm, 150 deg C	ASTM D-790	0.7 x 10 <sup>6</sup> psi	5 GPa
Tensile Strength	ASTM D-638	4,500 psi	30 MPa
Tensile Modulus	ASTM D-638	1.6 x 10 <sup>6</sup> psi	11 GPa
Notched Izod	ASTM D-256	0.8 ft*lb/in	45 Joules/m
Unnotched Impact	ASTM D-4812	1.6 ft*lb/in	85 Joules/m
Water Absorption	ASTM D-570	0.1%	0.1%

This BMC product is generally intended to be injection molded in matched metal die molds, typically at 320°F (160°C) and 1000 psi injection pressure. Strength values may be affected by the molding process. Nominal values for polymerization shrinkage (0.0003 in/in expansion) and specific gravity (1.79) may be customized for individual applications. Contact your Premix sales representative for specific design recommendations.

**Following physical characteristics are typical of this product:**

CLTE, XY direction: 25 ppm/ deg C
CLTE, Z direction: 40 ppm/deg C
Thermal Conductivity: 0.25 W/m*deg K
Poisson's Ratio: 0.3

**The values presented in this data sheet are typical values and are not to be interpreted as product specifications.**

All statements, information and data given herein are believed to be accurate and reliable but are presented without guarantee, expressed or implied.

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