

**Technical Data Sheet**  
**BMC 1000- Series - Headlamp**  
 Engineered Composites



**Product Description**

Glass Fiber reinforced Polyester BMC suitable for Automotive industry. This class is a thermoset compound designed for the production of headlamps and Brackets with outstanding resistance at high temperatures.

**General**

|                        |  |                               |                    |
|------------------------|--|-------------------------------|--------------------|
| Material Status        | • Commercial: Active   |                               |                    |
| Availability           | • North America<br>• Asia Pacific  | • Europe<br>• South America   |                    |
| Filler / Reinforcement | • Glass Fiber and Mineral Filler   |                               |                    |
| Features               | • Good Dimensional Stability   | • High temperature Resistance | • Outstanding Flow |
| Processing Method      | • This BMC product is generally intended to be a injection or transfer molded in matched metal die molds, typically at 320°F (160°C), but the temperature process depend of the formula, paint process (Varnish), tool design and machine. Strength values may be affected by the molding process. |                               |                    |
| Resin                  | • Unsaturated Polyester  |                               |                    |

| Physical                       | Typical      | Unit              | Test Method |
|--------------------------------|--------------|-------------------|-------------|
| Density                        | 1.85-2.10    | g/cm <sup>3</sup> | ASTM D792   |
| Mold Shrinkage                 | -0.200-0.100 | %                 | ASTM D955   |
| Water Absorption, 24 hrs. 23°C | Max. 0.5     | %                 | ASTM D570   |
| Mechanical                     | Typical      | Unit              | Test Method |
| Tensile Strength               | Min. 25      | MPa               | ASTM D638   |
| Flexural Modulus               | Min. 9.0     | GPa               | ASTM D790   |
| Flexural Strength              | Min.60       | MPa               | ASTM D790   |
| Thermal                        | Typical      | Unit              | Test Method |
| Heat Deflection Temperature    | > 250        | °C                | ASTM D648   |

**Technical Data Sheet**  
**BMC 1000- Series - Headlamp**  
Engineered Composites



**Notes**

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

**Processing Techniques**

Specific recommendations for resin type and processing conditions can only be made when the end use, required properties and fabrication equipment are known.

**Company Information**

For further information regarding the LyondellBasell company, please visit <http://www.lyb.com/>.

© LyondellBasell Industries Holdings, B.V. 2019

**Disclaimer**

Information in this document is accurate to the best of our knowledge at the date of publication. The document is designed to provide users general information for safe handling, use, processing, storage, transportation, disposal and release and does not constitute any warranty or quality specification, either express or implied, including any warranty of merchantability or fitness for any particular purpose. Users shall determine whether the product is suitable for their use and can be used safely and legally.

In addition to any prohibitions of use specifically noted in this document, LyondellBasell may further prohibit or restrict the sale of its products into certain applications. For further information, please contact a LyondellBasell representative.

**Trademarks**

The Trademark referenced within the product name is owned or used by the LyondellBasell family of companies.