

AMC 85691 BK (preliminary)

Description:

AMC® 85691 BK is a chopped carbon fiber reinforced molding compound. It is easily moldable and provides parts that are high strength, fatigue resistant and a low density. The carbon fiber is standard modulus PAN based 50K tow.

Resin / Reinforcement :

VE Hybrid / 50% of 25 mm CF-50K- Split-Fiber

Features:

- Fatigue resistance, High stiffness, Black Color, High strength
- Shelf Life 8 weeks at 20°C max

Properties:

Density	ISO 1183 A	g/cm ³	1.5
Shrinkage	ISO 2577	%	< 0,00 (elongation)
Tensile Modulus	ISO 527-4	GPa	25
Tensile Strength	ISO 527-4	MPa	95
Flexural Modulus	ISO 14125	GPa	21
Flexural Strength	ISO 14125	MPa	260
Impact Strength	ISO 179	kJ/m ²	42
Heat Distortion Temperature	ISO 75-2	°C	> 200
Glass Transition TanDelta	ISO 6721-1	°C	135

Properties were determined on compression-moulded specimens according DIN EN 14598

Our TECHNICAL INFORMATIONS are established following the above mentioned standards and to the best of our knowledge. However, their contents are not legally binding. All values are reference values and should be thoroughly checked by field tests.

lyondellbasell <i>Advancing Possible</i>	Date 13.07.2022	Page 2 / 2
	Technical Information	02028

Molding Suggestions

AMC® 85691 BK can be molded at temperatures in the range of 130 - 155°C, with 140°C suggested as a starting point. Cure times will be dependent on molding temperature and part thickness and will typically be 5 - 10 minutes. Detailed molding suggestions are available on request. Cool molded parts at ambient temperature. A cooling fixture may be needed depending on part thickness and geometry.

Precautions

AMC® 85691 BK contains carbon fibers and should be handled carefully in order to minimize skin contact. Molding areas should be well ventilated to minimize exposure to fumes. Presses must be provided with local exhaust to remove vapors from work areas. If adequate ventilation is not available, a respirator approved for removing organic vapor must be used. Care must be taken to prevent contact of carbon fibers with electrical equipment.

Typical Uncured and Cured Properties tested each lot of – **AMC® 85691 BK**:

- Grammage
- Reactivity
- Density

NO WARRANTY

The above information is offered for your consideration, investigation, and verification. No warranty, expressed or implied, is given as to the materials described on this Technical Data Sheet. Quantum Composites, Inc. specifically disclaims any warranty of merchantability or fitness for any particular purpose. Final determination of the suitability of this material is the sole responsibility of the buyer. Contact our sales representative for assistance in developing procedures to fit individual requirements.

This product is generally intended to be compression molded in matched-metal die molds. Strength values may be affected by the molding process. The values presented in this data sheet are typical values and are not to be interpreted as product specifications.

Our TECHNICAL INFORMATIONS are established following the above mentioned standards and to the best of our knowledge. However, their contents are not legally binding. All values are reference values and should be thoroughly checked by field tests.
--