

BFG30–BN00N2

PA 6 injection molding grade, 30% glass fiber reinforced, natural color.

Property	Test Condition	Unit	Standard	Value	Value
Rheological properties				D.A.M	Moisture Content
Melt volume–flow rate	275 °C;5 kg	cm ³ /(10min)	ISO 1133	–	
Molding shrinkage, parallel	60x60x2mm/MT 80°C	%	ISO 294	0.3	
Molding shrinkage, normal	60x60x2mm/MT 80°C	%	ISO 294	0.7	
Mechanical properties					
Tensile modulus	1 mm/min	Mpa	ISO 527–1,–2	8600	–
Tensile Stress at break	5 mm/min	Mpa	ISO 527–1,–2	167	–
Tensile Strain at break	5 mm/min	%	ISO 527–1,–2	3.3	–
Tensile creep modulus	1 h	Mpa	ISO 899–1	–	–
Tensile creep modulus	1000 h	Mpa	ISO 899–1	–	–
Charpy impact strength	23°C	kJ/m ²	ISO 179–1eU	85.0	–
Charpy impact strength	–30°C	kJ/m ²	ISO 179–1eU	–	–
Charpy notched impact strength	23°C	kJ/m ²	ISO 179–1eA	12.1	–
Charpy notched impact strength	–30°C	kJ/m ²	ISO 179–1eA	–	–
Izod impact strength	23°C	kJ/m ²	ISO 180–1U	–	–
Izod impact strength	–30°C	kJ/m ²	ISO 180–1U	–	–
Izod notched impact strength	23°C	kJ/m ²	ISO 180–1A	12.0	–
Izod notched impact strength	–30°C	kJ/m ²	ISO 180–1A	–	–
Izod notched impact strength	–40°C	kJ/m ²	ISO 180–1A	–	–
Flexural modulus	5 mm/min	MPa	ISO 178	8400	–
Flexural strength	5 mm/min	Mpa	ISO 178	265	–
Thermal properties					
Melting temperature	10°C/min	°C	ISO 11357–1,–3		220
Temperature of deflection under load	1.80 MPa	°C	ISO 75–1,–2		210
Temperature of deflection under load	0.45 MPa	°C	ISO 75–1,–2		220
Burning behavior UL 94	1.6 mm	Class	UL 94		HB
Other properties (23°C)					
Water absorption	Water at 23°C/24hr	%	ISO 62		0.9
Moisture absorption (Equilibrium value)	23°C; 50 % RH	%	ISO 62		–
Density		kg/m ³	ISO 1183		1.35
Glass fiber / glass bead / filler content		%	ISO 3451–1		30
Bulk density		kg/m ³	ISO 60		–
Processing conditions for test specimens					
Injection molding–Melt temperature		°C	ISO 294		270~290
Injection molding–Mold temperature		°C	ISO 294		80~120
Drying temperature		°C	–		80
Drying time dry air dryer		h	–		2~6
Residual moisture content		%	Karl Fischer		<0.1

Disclaimer

Disclaimer for sales products

This information and our technical advice – whether verbal, in writing or by way of trials – are given in good faith but without warranty, and this also applies where proprietary rights of third parties are involved. Our advice does not release you from the obligation to verify the information currently provided – especially that contained in our safety data and technical information sheets – and to test our products as to their suitability for the intended processes and uses. The application, use and processing of our products and the products manufactured by you on the basis of our technical advice are beyond our control and, therefore, entirely your own responsibility. Our products are sold and our advisory service is given in accordance with the current version of our General Conditions of Sale and Delivery.

Test values

Unless specified to the contrary, the values given have been established on standardized test specimens at room temperature. The figures should be regarded as guide values only and not as binding minimum values. Kindly note that, under certain conditions, the properties can be affected to a considerable extent by the design of the mould/die, the processing conditions and the colouring.

Processing note

Under the recommended processing conditions small quantities of decomposition product may be given off during processing. To preclude any risk to the health and well-being of the machine operatives, tolerance limits for the work environment must be ensured by the provision of efficient exhaust ventilation and fresh air at the workplace in accordance with the Safety Data Sheet. In order to prevent the partial decomposition of the polymer and the generation of volatile decomposition products, the prescribed processing temperatures should not be substantially exceeded. Since excessively high temperatures are generally the result of operator error or defects in the heating system, special care and controls are essential in these areas.