

Product Information **Petra®**
7010 BK5830



10/2023

PET-GF15

Product description

Petra® 7010 BK5830 is a 15% glass fiber reinforced, pigmented black injection molding compound based on post-consumer recycle polyethylene terephthalate. Formulated for superior surface aesthetics, it exhibits excellent melt stability and high flow over a broad range of processing conditions. The combination of high strength and dimensional stability enable its use in structural applications designed for metal.

Petra® 7010 BK5830 is recommended for applications such as appliance door handles and knobs.

Injection Molding

PROCESSING
injection molding, Melt temperature, range 280 - 300
injection molding, Mold temperature, range 100 - 110

Material Handling

Max. Water content: 0.02%

To ensure optimum part performance, this product must be dried prior to molding and maintained at a moisture level of less than 0.02%, with a preferred moisture target of less than 0.015%. A dehumidifying hopper dryer mounted on the molding machine and equipped with alternating desiccant beds and air temperature/dew point indicators is recommended. Drying time is 2 - 4 hours at 120°C (248°F). Further information concerning safe handling procedures can be obtained from the Safety Data Sheet. Alternatively, please contact your BASF representative.

Note

The data contained in this publication are based on our current knowledge and experience. In view of the many factors that may affect processing and application of our product, these data do not relieve processors from carrying out their own investigations and tests; neither do these data imply any guarantee of certain properties, nor the suitability of the product for a specific purpose. Any descriptions, drawings, photographs, data, proportions, weights etc. given herein may change without prior information and do not constitute the agreed contractual quality of the product. It is the responsibility of the recipient of our products to ensure that any proprietary rights and existing laws and legislation are observed. In order to check the availability of products please contact us or our sales agency.

Product Information

Typical values for uncoloured product at 23 °C ¹⁾	Test method	Unit	Values ²⁾
Properties			
Polymer abbreviation	-	-	PET-GF15
Filler content: Glass fiber (GF), glass balls (GB), Mineral (M)	-	%	GF15
Density	ISO 1183	kg/m ³	1420
Processing			
Melt temperature, Injection moulding/Extrusion	-	°C	280 - 300
Mould temperature, Injection moulding	-	°C	100 - 110
Mechanical properties			
Tensile modulus	ISO 527-1/-2	MPa	6780
Yield stress, 50 mm/min	ISO 527-1/-2	MPa	95
Yield strain, 50 mm/min	ISO 527-1/-2	%	2.7
Flexural strength	ISO 178	MPa	139
Flexural modulus	ISO 178	MPa	6060
Charpy notched impact strength (23°C)	ISO 179/1eA	kJ/m ²	5
Izod notched impact strength (23°C)	ISO 180/A	kJ/m ²	5
Thermal properties			
Melting temperature, DSC	ISO 11357-1/-3	°C	238
HDT A (1.80 MPa)	ISO 75-1/-2	°C	168

Footnotes

1) If product name or properties don't state otherwise.

2) The asterisk symbol "*" signifies inapplicable properties.