Product Information **Nypel®**

RC6030F BK

10/2023 **PA6**

Product description

Nypel® RC6030F BK is a 30% glass fiber reinforced, injection molding compound produced with 25% post-consumer recycled polymer content. This product is a regional grade available in North America only.

Nypel® RC6030F BK is generally recommended for applications such as bolts, racks, automotive underhood components, pressure regulator housings and caps.

Injection Molding

PROCESSING
injection molding, Melt temperature, range 270 - 295
injection molding, Mold temperature, range 80 - 95

Material Handling

Max. Water content: 0.15%

Material is supplied in sealed containers and drying prior to molding in a dehumidifying or desiccant dryer is recommended. Drying parameters are dependent upon the actual percentage of moisture in the pellets and typical pre-drying conditions are 2-4 hours at 180F (83C). Further information concerning safe handling procedures can be obtained from the Safety Data Sheet (MSDS), or by contacting your BASF representative.

Note

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48192 Wyandotte, USA

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Product Information

We create chemistry

Typical values for uncoloured product at 23 °C[1)]	Test method	Unit	Values[2)]
Properties			**dry / cond.**
Polymer abbreviation	-	-	**PA6**
Filler content: Glass fiber (GF), glass balls (GB), Mineral (M)	-	%	**GF30**
Density	ISO 1183	kg/m³	**1350 / -**
Water absorption, 24 h in water, 23 °C	ISO 62	%	**1.1**
Moisture absorption, equilibrium 23°C/50% r.h.	similar to ISO 62	%	**1.9**
Water absorption, equilibrium in water at 23°C	similar to ISO 62	%	**6.7**
Processing			
Melt temperature, Injection moulding/Extrusion	-	°C	**270 - 295**
Mould temperature, Injection moulding	-	°C	**80 - 95**
Mechanical properties			**dry / cond.**
Tensile modulus	ISO 527-1/-2	MPa	**9660 / -**
Yield stress, 50 mm/min	ISO 527-1/-2	MPa	**154 / -**
Yield strain, 50 mm/min	ISO 527-1/-2	%	**2.5 / -**
Flexural strength	ISO 178	MPa	**230 / -**
Flexural modulus	ISO 178	MPa	**8380 / -**
Charpy unnotched impact strength (23°C)	ISO 179/1eU	kJ/m²	**56 / -**
Charpy notched impact strength (23°C)	ISO 179/1eA	kJ/m²	**8.5 / -**
Charpy notched impact strength (-30°C)	ISO 179/1eA	kJ/m²	**8 / -**
Thermal properties			**dry / cond.**
Melting temperature, DSC	ISO 11357-1/-3	°C	**218**
HDT A (1.80 MPa)	ISO 75-1/-2	°C	**203**
HDT B (0.45 MPa)	ISO 75-1/-2	°C	**218**
Coefficient of linear thermal expansion, longitudinal (23-80)°C	ISO 11359-1/-2	E-6/K	**25**
Coefficient of linear thermal expansion, transverse(23-80)°C	ISO 11359-1/-2	E-6/K	**67**

Footnotes
1) If product name or properties don't state otherwise.
2) The asterisk symbol '*' signifies inapplicable properties.

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