Polypropylene

HK060AE

Polypropylene Homopolymer

Description

HK060AE is a low viscosity polypropylene homopolymer optimised for the dilution for PP long glass fibre concentrates in the injection moulding process. This material is also suitable the production of PP glass fibre composites in the Direct Long Fibre Technology (DLFT) process.

Typical characteristics

HK060AE can be described with following typical characteristics:

high flowability easy processing

long term heat stabilized

contains a basic conversion and long term heat stabilization

Applications

HK060AE is intended for following applications:

Front end carriers

Under body shieldings

Dashboard carriers

Door module carriers

Physical properties

Property	Typical value *	Unit	Test method
Density	905	kg/m³	ISO 1183-1
Melt flow rate (230 °C/2.16 kg)	125	g/10min	ISO 1133-1
Flexural modulus (2 mm/min)	1550	MPa	ISO 178
Tensile strength (50 mm/min)	35	MPa	ISO 527-2
Charpy impact strength, notched (23 °C)	1.0	kJ/m²	ISO 179-1/1eA
Charpy impact strength, notched (-20 °C)	0.9	kJ/m²	ISO 179-1/1eA
Charpy impact strength, notched (-30 °C)	0.8	kJ/m²	ISO 179-1/1eA
Heat deflection temperature B (0.45 MPa)	91	°C _	ISO 75-2

^{*} Data should not be used for specification work

Processing techniques

The actual conditions will depend on the type of equipment used

This product is easy to process with standard injection moulding machines. To avoid residual humidity from transport or storage, the material should be pre-dried approximately 2h at 80°C. Following parameters should be used as guidelines:

Processing setting	Typical value/range	
Feeding temperature	40-80 °C	
Mass temperature	210-250 °C	
Back pressure	as low as possible bar	
Mould temperature	30-50 °C	
Injection speed	100-200 mm/s	



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Packaging and storage

HK060AE should be stored in dry conditions at temperatures below 50°C and protected from UV-light. Improper storage can initiate degradation, which can result in odour generation and colour changes and can have negative effects on the physical properties of this product.

Product compliance documents

Latest versions of product safety information sheets (PSIS), product safety data sheets (SDS) and other product liability documents are available in our website www.borealisgroup.com.

Sustainability aspects

Borealis is ever mindful of the impact of our products on the planet. We promote Design for Circularity (DfC) and Design for Recycling (DfR) to conserve natural resources and to reduce the environmental impact of products over their entire lifetime (including production, use phase and after phase). DfR helps ensure that material can be effectively recycled while maximizing the material performance efficiency.

Further information on sustainability and Design for Recycling (DfR) can be found from our websites www.borealisgroup.com and www.borealiseverminds.com.

Disclaimer

The product(s) mentioned herein are not intended to be used for medical, pharmaceutical or healthcare applications and we do not support their use for such applications.

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