

Polypropylene

MG141HP

Polypropylene Mineral Filled Compound

Description

MG141HP is a 10% mineral-filled polypropylene compound intended for injection moulding. This material has an excellent balance between impact strength and stiffness, high melt flow rate and gives good surface quality.

Typical characteristics

MG141HP can be described with following typical characteristics:

Excellent surface appearance

Long term high heat stabilised

Food contact statement available

Applications

MG141HP is intended for following applications:

Aesthetical parts

Climate control housings

Appliances

Household applications

Air ducts

Houseware

Physical properties

Property	Typical value *	Unit	Test method
Density	980	kg/m ³	ISO 1183-1
Flexural Modulus (2 mm/min) (23°C)	2500	MPa	ISO 178
Melt flow rate (230 °C/2.16 kg)	20	g/10min	ISO 1133-1
Tensile strength (50 mm/min)	37	MPa	ISO 527-2
Charpy impact strength, unnotched (23 °C)	3,5	kJ/m ²	ISO 179-1/1eA
Charpy impact strength, notched (23 °C)	1,5	kJ/m ²	ISO 179-1/1eA
Heat deflection temperature B (0.45 MPa)	120	°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.

Injection Moulding:

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 for approximately 2h at 80°C.

The following moulding parameters should be used as guidelines:

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Processing setting	Typical value/range
Feeding temperature	40-80 °C
Mass temperature	220 - 260 °C
Back pressure	Low to medium
Holding pressure	30 - 60 MPa
Mould temperature	30 - 50 °C
Screw speed	Low to medium
Flow front speed	100 - 200 mm/s

Packaging and storage

WG140AI 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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