

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
 Food contact statement available
 Long term high heat stabilised

Applications

MG141HP is intended for following applications:

Aesthetical parts
 Air ducts
 Appliances
 Climate control housings
 Household applications
 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:

Polypropylene

MG141HP

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

MG141HP 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.

To the best of our knowledge, the information contained herein is accurate and reliable as of the date of publication; however we do not assume any liability whatsoever for the accuracy and completeness of such information.

Borealis makes no warranties which extend beyond the description contained herein. Nothing herein shall constitute any warranty of merchantability or fitness for a particular purpose.

It is the customer's responsibility to inspect and test our products in order to satisfy itself as to the suitability of the products for the customer's particular purpose. The customer is responsible for the appropriate, safe and legal use, processing and handling of our products.

No liability can be accepted in respect of the use of any Borealis product in conjunction with any other products and/or materials. The information contained herein relates exclusively to our products when not used in conjunction with any other material unless as specifically provided for in the test methods stated above.