PRODUCT DATA SHEET

Polypropylene

MD441U

Polypropylene Mineral Filled Compound

Description

MD441U is a mineral filled polypropylene compound intended for injection molding.This material has excellent balanced mechanical properties and a medium melt flow rate.
This product is only available in technical black with color code -8229.

Typical characteristics

Low shrinkage
Excellent dimensional stability
Long term high heat stabilised
UL94 listed

Applications

MD441U is intended for following applications:

Air conditioning parts
Small appliances
Heater housings
Structural parts
Under the bonnet components
White goods

Physical properties

Property	Typical value *	Unit	Test method
Density	1220	kg/m³	ISO 1183-1
Melt flow rate (230 °C/2.16 kg)	6	g/10min	ISO 1133-1
Flexural modulus (2 mm/min)	4700	MPa	ISO 178
Charpy impact strength, notched (-20 °C)	1.2	kJ/m²	ISO 179-1/1eA
Charpy impact strength, notched (23 °C)	1.5	kJ/m²	ISO 179-1/1eA
Heat deflection temperature B (0.45 MPa)	130	°C	ISO 75-2
Tensile strength (50 mm/min)	32	MPa	ISO 527-2

* Data should not be used for specification work

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

The actual conditions will depend on the type of equipment used.

Processing techniques

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

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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

Borealis GmbH | Trabrennstrasse 6-8 | A-1020 Vienna | Austria
Telephone: +43 1 22 400 0* | Fax: +43 1 22 400 333
Website www.borealisgroup.com