

Polypropylene

ME212U

Polypropylene Mineral Filled Compound

Description

ME212U is a 20% mineral filled polypropylene compound intended for injection molding. The product is available in standard black "-9502"

Typical characteristics

ME212U can be described with following typical characteristics:

Long term high heat stabilised

Excellent dimensional stability

Good performance in emission

UL registered under File E108112

Excellent performance in odour

Applications

ME212U is intended for following applications:

Air conditioning parts

Heater housings

Air ducts

Under the bonnet components

Physical properties

Property	Typical value *	Unit	Test method
Density	1050	kg/m ³	ISO 1183-1
Melt flow rate (230 °C/2.16 kg)	12.0	g/10min	ISO 1133-1
Flexural modulus (2 mm/min)	3100	MPa	ISO 178
Charpy impact strength, notched (-20 °C)	2.0	kJ/m ²	ISO 179-1
Charpy impact strength, notched (23 °C)	3.0	kJ/m ²	ISO 179-1
Tensile strength (50 mm/min)	32	MPa	ISO 527-2
Heat deflection temperature B (0.45 MPa)	120	°C	ISO 75-2

* Data should not be used for specification work

Other properties

Property	Typical value *	Unit	Test method
Fogging (100 °C, 16 h)	<2	mg	DIN 75201
Total emission (headspace)	<50	µg C/g	VDA 277

* Data should not be used for specification work

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 2h at 80°C. Following parameters should be used as guidelines:

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Processing setting	Typical value/range
Feed section 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.

Packaging and storage

ME212U 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.

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