



Polypropylene

ME212U

Polypropylene Compound, Mineral Filled

Description

ME212U is a 20% mineral filled polypropylene compound intended for injection moulding.

This material has excellent balanced mechanical properties and is easy to process.

Applications

ME212U has been developed especially for applications like:

Air ducts

Air conditioning parts

Heater housings

Special features

Long term high heat stabilised
UL registered under File E108112
Excellent performance in odour

Excellent dimensional stability
Good performance in emission

Physical Properties

Property	Typical Value	Test Method
Data should not be used for specification work		
Density	1050 kg/m ³	ISO 1183
Melt Flow Rate (230 °C/2,16 kg)	13 g/10min	ISO 1133
Flexural Modulus (2 mm/min)	3.100 MPa	ISO 178
Flexural Strength	50 MPa	ISO 178
Tensile Modulus (1 mm/min)	2.900 MPa	ISO 527-2
Tensile Strain at Yield (50 mm/min)	10 %	ISO 527-2
Tensile Stress at Yield (50 mm/min)	32 MPa	ISO 527-2
Heat Deflection Temperature A (1,80 MPa)	75 °C	ISO 75-2
Heat Deflection Temperature B (0,45 MPa)	120 °C	ISO 75-2
Vicat softening temperature A, (10 N)	155 °C	ISO 306
Vicat softening temperature B, (50 N)	100 °C	ISO 306
Charpy Impact Strength, notched (23 °C)	3,0 kJ/m ²	ISO 179/1eA
Charpy Impact Strength, notched (-20 °C)	1,5 kJ/m ²	ISO 179/1eA
Charpy Impact Strength, unnotched (23 °C)	35 kJ/m ²	ISO 179/1eU
Charpy Impact Strength, unnotched (-20 °C)	15 kJ/m ²	ISO 179/1eU
Izod Impact Strength, notched (23 °C)	3,5 kJ/m ²	ISO 180/1A
Izod Impact Strength, notched (-20 °C)	2 kJ/m ²	ISO 180/1A
Izod Impact Strength, unnotched (23 °C)	40 kJ/m ²	ISO 180/1U
Izod Impact Strength, unnotched (-20 °C)	15 kJ/m ²	ISO 180/1U
Hardness, Ball Indentation H 358/30	96 MPa	ISO 2039

Values determined on standard injection moulded specimens conditioned at 23°C and 50% relative humidity after at least 96 hours storage time.

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ME212U**Application Related and other Tests**

Property	Typical Value	Test Method
Data should not be used for specification work		
Fogging (100 °C,16 h)	< 2,0 mg	DIN 75201
Emission	< 50 µgC/g	VDA 277
Mould average Shrinkage ¹	1,15 %	Borealis Method
Melt energy	101,31 kJ/kg	DSC ISO 11357

¹ VALUES MAY ONLY BE USED AS INDICATION, AND SHOULD NOT BE USED DIRECTLY IN MOULD DESIGN WITHOUT PRIOR VALIDATION

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

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

Storage

ME212U should be stored in dry conditions at temperatures below 50°C and protected from UV-light. Improper storage can initiate degradation, which results in odour generation and colour changes and can have negative effects on the physical properties of this product.

Safety

The product is not classified as dangerous.

Please see our "Safety data sheet" / "Product safety information sheet" for details on various aspects of safety of the product. For more information, contact your Borealis representative.

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ME212U**Recycling**

The product is suitable for recycling using modern methods of shredding and cleaning. In-house production waste should be kept clean to facilitate direct recycling.

Please see our "Safety data sheet" / "Product safety information sheet" for details on various aspects of recovery and disposal of the product.

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.

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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.

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