

Polypropylene

Borcycle™ MD4481SY

Recycled PP Compound

Description

Borcycle MD4481SY is a virgin/recycled PP solution compound with 40% post-consumer recycle and 40% mineral filler. Products originating from this grade have an excellent balance between stiffness and impact strength also at elevated temperature. The product is available in black colour.

Typical characteristics

Borcycle™ MD4481SY can be described with following typical characteristics:

High heat stabilized
 Good stiffness and impact strength balance

Good flow behaviour

Applications

Borcycle™ MD4481SY is intended for following applications:

Appliances
 Injection-moulded non-food applications
 Small appliances

White goods
 Structural parts

Physical properties

Property	Typical value *	Unit	Test method
Density	1275	kg/m ³	ISO 1183-1
MFR 230°C/2.16kg	9	g/10min	ISO 1133-1
Flexural modulus (2 mm/min)	4000	MPa	ISO 178
Vicat softening temperature B50 (50 N)	80	°C	ISO 306
Charpy impact strength, notched (23 °C)	2.0	kJ/m ²	ISO 179-1/1eA
Tensile strength (50 mm/min)	29	MPa	ISO 527-2

* 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
Melt temperature	210 - 260 °C
Holding pressure	20 - 50 MPa
Mould temperature	30 - 40 °C
Screw speed	low to medium
Feeding temperature	40 - 80 °C
Back pressure	low to medium

Packaging and storage

Borcycle™ MD4481SY 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

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