

PRODUCT DATA SHEET

Polypropylene

Borcycle™ WC4585SY

Recycled PP Compound

Description

Borcycle™ WC4585SY is a high-performance hybrid reinforced (30% glass fibre / 10% mineral) compound with around 60% Post-Consumer Recycled (PCR) content for extrusion or injection moulding. This product is an ideal PCR solution, where sustainability and circularity matter. It is not intended for use in food contact, drinking water contact, pharmaceutical and medical applications. The product is available in black colour.

Typical characteristics

Borcycle™ WC4585SY can be described with following typical characteristics:

60 wt% Post-Consumer Recyclate

UV resistance

Good Stiffness Performance

High Dimensional Stability

Applications

Borcycle™ WC4585SY is intended for following applications:

Exterior applications in the construction and building industry

Railway industry

Building and construction

Rigid applications

Physical properties

Property	Typical value *	Unit	Test method
Density	1280	kg/m ³	ISO 1183-1
Melt flow rate (230 °C/2.16 kg)	5.0	g/10min	ISO 1133-1
Moisture content ¹	≤0,08	%	
Tensile modulus (1 mm/min)	7000	MPa	ISO 527-2
Tensile strength (50 mm/min)	60	MPa	ISO 527-2
Charpy impact strength, notched (23 °C)	7.5	kJ/m ²	ISO 179-1/1eA

* Data should not be used for specification work

¹ Internal Test Method

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
Feeding temperature	40 - 80 °C
Mass temperature	230 - 280 °C
Back pressure	low to medium
Holding pressure	30 - 60 MPa
Screw speed	low to medium
Flow front speed	100 - 200 mm/s

Packaging and storage

Borcycle™ WC4585SY 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

Recycled plastics are subject to material inconsistencies. mtm/Ecoplast makes no warranties which extend beyond the description contained herein and to the best of our knowledge, the information is accurate and reliable as of the date of publication. Because of the multitude of possible influences during the use and application of our products, the information included does not release customers and users from the obligation to examine and test them carefully. Please note that 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 as mtm/Ecoplast do not know the origin of the product. Where necessary, the customer is recommended to obtain a feedstock release from the customer. 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 mtm/Ecoplast 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. The product(s) mentioned herein are not intended to be used for food contact, drinking water contact, medical, pharmaceutical or healthcare applications and we do not support their use for such applications. Otherwise, our General Terms and Conditions of Sale apply.