



Polypropylene

SR533

Polypropylene Compound

Description

SR533 is a polypropylene compound intended for injection moulding.

Applications

SR533 has been developed especially for the car industry to be used in automotive exterior parts.

Bumpers

Special features

Good stiffness and impact balance

Good impact performance for low temperature applications

Physical Properties

Property	Typical Value	Test Method
Data should not be used for specification work		
Density	900 kg/m ³	ISO 1183
Melt Flow Rate (230 °C/2,16 kg)	11 g/10min	ISO 1133
Flexural Modulus (2 mm/min)	800 MPa	ISO 178
Flexural Strength	21 MPa	ISO 178
Tensile Strain at Yield (50 mm/min) (23 °C)	5 %	ISO 527-2
Tensile Stress at Yield (50 mm/min) (23 °C)	20 MPa	ISO 527-2
Heat Deflection Temperature Edgewise (1,80 MPa)	50 °C	ISO 75-2
Vicat softening temperature B50,	54 °C	ISO 306
Izod Impact Strength, notched (23 °C)	40 kJ/m ²	ISO 180/1A
Izod Impact Strength, notched (-30 °C)	6 kJ/m ²	ISO 180/1A
Hardness, Shore D	56	ISO 868
Hardness, Rockwell (R-scale)	70	ISO 2039-2

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

Combustion Properties

Property	Typical Value	Test Method
Data should not be used for specification work		
Flammability at thickness 1 mm	Max100 mm/min	ISO 3795

Processing Techniques

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

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SR533 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
Holding pressure	30 - 60 MPa
Back pressure	Low to medium
Mould temperature	30 - 50 °C
Screw speed	Low to medium
Flow front speed	100 - 200 mm/s

Storage

SR533 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, recovery and disposal of the product. For more information, contact your Borealis representative.

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.

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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.

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