



# 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 <sup>3</sup>	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 <sup>2</sup>	ISO 180/1A
Izod Impact Strength, notched (-30 °C)	6 kJ/m <sup>2</sup>	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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**SR533**

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