

## Polypropylene

# SH950MO

### Polypropylene Random/Heterophasic Copolymer

#### Description

SH950MO is a random heterophasic copolymer intended for injection moulding.

This grade yields high transparency and deep freeze impact resistance combined with excellent flow properties. The material is nucleated with Borealis Nucleation Technology (BNT) which, in combination with excellent stiffness and good flow properties, creates a high potential for wall-thickness reduction. This grade also contains antistatic and demoulding additives which, together with enhanced nucleation, create a high potential for cycle time reduction. Products moulded with SH950MO have an excellent balance of see-through transparency and deep freeze impact resistance. In addition, components have good gloss, very low stress whitening, and excellent taste and odour properties.

Cas No. 9010-79-1 9002-88-4

#### Typical characteristics

SH950MO can be described with following typical characteristics:

Good flow	Improved gloss and excellent transparency
Good impact strength	Very low influence on taste & odour

#### Applications

SH950MO is intended for following applications:

Boxes and crates	Deep freeze boxes for food storage
Caps	High gloss closures
Crates	Ice cream containers

#### Physical properties

Property	Typical value *	Unit	Test method
Density	905	kg/m <sup>3</sup>	ISO 1183-1
Melt flow rate (230 °C/2.16 kg)	40	g/10min	ISO 1133-1
Flexural modulus	950	MPa	ISO 178
Tensile modulus (1 mm/min)	1050	MPa	ISO 527-2
Tensile stress at yield (50 mm/min)	20	MPa	ISO 527-2
Tensile strain at yield (50 mm/min)	10	%	ISO 527-2
Charpy impact strength, notched (23 °C)	8	kJ/m <sup>2</sup>	ISO 179-1/1eA
Charpy impact strength, notched (-20 °C)	3	kJ/m <sup>2</sup>	ISO 179-1/1eA
Heat deflection temperature B (0.45 MPa) <sup>1</sup>	75	°C	ISO 75-2

\* Data should not be used for specification work

<sup>1</sup> Measured on injection moulded specimens acc. to ISO 1873-2

#### Processing techniques

This product is easy to process with standard injection moulding machines.

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Processing setting	Typical value/range
Melt temperature	200 - 250 °C
Holding pressure <sup>2</sup>	200 - 500 bar
Mould temperature	15 - 40 °C
Injection speed	High

<sup>2</sup>Minimum to avoid sink marks.

Shrinkage 1 - 2 %, depending on wall thickness and moulding parameters.

### Packaging and storage

SH950MO 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](http://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](http://www.borealisgroup.com) and [www.borealiseverminds.com](http://www.borealiseverminds.com).

### Disclaimer

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