



Polypropylene BD950MO

Polypropylene for Injection Moulding

Description

BD950MO is a stiff and impact resistant heterophasic copolymer (block copolymer) intended for compression moulding and injection moulding. The main features are very good processability, high melt strength and extremely low potential for stress whitening.

With the very effective nucleation of Borealis Nucleation Technology (BNT), **BD950MO** offers the potential of increased productivity through cycle time reduction. Furthermore, as with all BNT moulding products, **BD950MO** exhibits excellent dimensional consistency with different colorants. This is combined with an excellent creep resistance and an optimal stiffness impact balance. It has a slip and antistatic formulation that provides good demoulding properties, low dust attraction and low coefficient of friction to meet the industry standards on closure opening torques.

Applications

BD950MO has been developed for compression moulding and injection moulding and is specially intended for caps and closures. Its properties and additive package have been specifically optimised for the production of caps and closures for carbonated soft drinks, water, food and other closure applications.

Physical Properties**

		Typical Value*	Unit	Test Method
Density			kg/m ³	ISO 1183
Melt Flow Rate	(230°C/2.16kg)	8	g/10 min	ISO 1133
Tensile Stress at Yield	(50 mm/min)	27	MPa	ISO 527-2
Tensile Strain at Yield	(50 mm/min)	4,5	%	ISO 527-2
Tensile Modulus	(1 mm/min)	1500	MPa	ISO 527-2
Charpy Impact Strength, notched	(+23°C)	8,5	kJ/m ²	ISO 179/1eA
Charpy Impact Strength, notched	(-20°C)	4.5	kJ/m ²	ISO 179/1eA
Hardness, Rockwell		89	R-scale	ISO 2039-2
Heat Deflection Temperature	(0.45 N/mm ²)	110	°C	ISO 75-2
Instrumented Falling Weight				
Total Penetration Energy	(0°C)	20	J	ISO 6603-2
Total Penetration Energy	(-20°C)	15	J	ISO 6603-2

* Data should not be used for specification work

** Mechanical properties determined on injection moulded specimens acc. to ISO 1873-2 (97), based on 7 days conditioning time.

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Processing Guidelines

The grade can be moulded on all standard injection moulding machines. Following moulding parameters should be used as guidelines.

Melt temperature	230 – 260°C
Injection speed	Highest possible
Holding pressure	Minimum required to avoid sink marks (typical values are 200 - 500 bars)
Mould temperature	10 – 30°C
Shrinkage	1.5 - 2%, depending on wall thickness and moulding parameters

For Compression Moulding with **BD950MO**, the standard PP processing conditions should be used but the potential for a cycle time reduction should be checked.

Storage and Handling

The product 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 the product.

Safety

BD950MO is not classified as dangerous preparation.

Dust and fines from the product carry a risk of dust explosion. All equipment should be properly earthed. Inhalation of dust should be avoided as it may cause irritation of the respiratory system.

Small amounts of fumes are generated during processing of the product. Proper ventilation is therefore required.

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.

A Safety Data Sheet is available on request. Please contact your Borealis representative for more details on various aspects on the usability, safety, recovery and disposal of the product.



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Related Documents

The following related documents are available on request, and represent various aspects on the usability, safety, recovery and disposal of the product:

Recovery and disposal of Polyolefins
Information on Emissions from Processing and Fires
Safety Data Sheet, SDS
Environmental Fact Sheet

Liability statements on:

- Compliance to Food Contact Regulations

Disclaimer

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