



Polypropylene

RJ470MO

Polypropylene Random Copolymer for Injection Moulding

Description

RJ470MO is a highly transparent polypropylene random copolymer with very high fluidity intended for injection moulding. **RJ470MO** has excellent flow and it is specially formulated for high speed injection moulding. It contains nucleating agent allowing high demoulding temperature as well as reduced cooling time. Furthermore optimised additivition package provides good antistatic and good demoulding properties.

Products moulded from **RJ470MO** are characterised by excellent clarity and gloss and they exhibit good balance of stiffness and impact strength in ambient temperature. **RJ470MO** is a CR (Controlled Rheology) grade with narrow molecular weight distribution giving low warpage.

Applications

RJ470MO is designed for highly transparent injection moulded items with very thin walls and very complex geometry. It can be used in food packaging and houseware. Typical applications are:

- Thin wall cups and lids
- Square containers and boxes
- Houseware containers

Physical Properties

		Typical Value*	Unit	Test Method
Density		905	kg/m ³	ISO 1183
Melt Flow Rate	(230°C/2.16 kg)	70	g/10 min	ISO 1133
Tensile Stress at Yield	(50 mm/min)	30	MPa	ISO 527-2
Tensile Strain at Yield	(50 mm/min)	12	%	ISO527-2
Tensile Modulus	(1 mm/min)	1200	MPa	ISO 527-2
Charpy Impact Strength, notched	(+23°C)	5,5	kJ/m ²	ISO 179/1eA
Hardness Rockwell		88	R-scale	ISO 2039-2
Heat Deflection Temperature	(0.45 N/mm ²)	84	°C	ISO 75-2

* Data should not be used for specification work.

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

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Processing Guidelines

RJ470MO is easy to process on standard injection moulding machines

Melt temperature	200 - 250°C
Injection speed	High
Holding pressure	Minimum required to avoid sink marks (typical values are 200-500 bars)
Mould temperature	15 – 40°C
Shrinkage	1-2 % depending on wall thickness, geometry and moulding parameters

Storage and handling

RJ470MO 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

RJ470MO 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 of 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.
- BSE-statement
- Heavy Metals
- Environmental fact sheet
- Free from certain components

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