



Polypropylene PP1121

Description

PP1121 is a high impact polypropylene heterophasic copolymer intended for extruded goods. This grade is characterized by combination of good stiffness, good creep resistance and very high impact strength even at low temperatures. This grade features high thermal stability, very low shrinkage and very good processability. As all polypropylenes, this grade shows excellent stress-cracking and chemical resistances.

This grade is mildly nucleated to maximize the mechanical stiffness. Nucleation, good flow properties and high stiffness create a high potential for cycle time reduction.

Special Features

Good stiffness
Good impact strength
Good stress crack resistance

Very good processability
High melt stability
Very low post extrusion shrinkage

Physical Properties

Property	Typical Value	Test Method
Data should not be used for specification work		
Melt Flow Rate (230 °C/2,16 kg)	3,5 g/10min	ISO 1133-1, Method A
Flexural Modulus	1.250 MPa	ISO 178
Tensile Modulus (50 mm/min)	1.350 MPa	ISO 527-2
Tensile Strain at Yield (50 mm/min)	6 %	ISO 527-2
Tensile Stress at Yield (50 mm/min)	25 MPa	ISO 527-2
Heat Deflection Temperature (0,45 N/mm ²) ¹	85 °C	ISO 75-2
Charpy Impact Strength, notched (23 °C)	15 kJ/m ²	ISO 179/1eA
Charpy Impact Strength, notched (-20 °C)	6,5 kJ/m ²	ISO 179/1eA

¹ Measured on injection moulded specimens acc. to ISO 1873-2

Processing Techniques

This product is easy to process with standard extrusion machines.

Following extrusion parameters should be used as guidelines:

when extruding PP1121 a typical Extruder Temperature profile is 195-230-230-230/230.

Specific recommendations for processing conditions can be determined only when the application and type of equipment are known. Please contact your local Borealis representative for such particulars.



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Storage

PP1121 has a shelf life of 24 months from production date if stored in unopened original packages, under dry and clean conditions at temperatures between 10 - 30 °C (50 - 85 °F).

Material shelf life is affected by the storage conditions and extreme conditions influence the general material quality and performance. It is also recommended to ensure proper stock rotation by First In – First Out principle.

More information on storage is found in the Safety data sheet (SDS) / Product safety information sheet (PSIS) for this product.

Safety

The product is not classified as dangerous.

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.

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.

Related Documents

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

"Safety data sheet" / "Product safety information sheet"
Recovery and disposal of polyolefins
Information on emissions from processing and fires
Statement on compliance to food contact regulations



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Disclaimer

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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