PRODUCT DATA SHEET

04.09.2024 Ed.2

Polypropylene

BA160E-8229-01

Polypropylene Heterophasic Copolymer

Description

BA160E-8229-01 is an impact polypropylene heterophasic block copolymer with optimised mechanical properties, intended for injection moulding of compression pipe fittings, black in colour.

The product has a special crystallinity brought by beta-nucleation which improves the mechanical properties as well as the crystallization temperature. This allows for cycle time reduction during injection molding through higher demolding temperatures and shorter cooling times.

Typical characteristics

BA160E-8229-01 can be described with following typical characteristics:

High stiffness and impact strength also at low temperatures.
Very good processability.
Excellent stress crack resistance.
Good resistance to chemicals.

Applications

BA160E-8229-01 is intended for following applications:

Drinking water
Industrial applications
Irrigation pipes

BA160E-8229-01 is especially recommended for injection molding of pipe compression fittings/mechanical pipe joints.

Physical properties

Property	Typical value *	Unit	Test method
Density	900	kg/m³	ISO 1183
Melt flow rate (230 °C/2.16 kg)	0.30	g/10min	ISO 1133-1
Tensile modulus	1300	MPa	ISO527-2
Tensile stress at yield	30	MPa	ISO527-2
Tensile strain at yield	11	%	ISO527-2
Heat deflection temperature B (0.45 MPa)	89	°C	ISO 75-2
Vicat softening temperature B50 (50 N)	86	°C	ISO 306
Charpy impact strength, notched (23 °C)	50	kJ/m²	ISO 179-1/1eA
Charpy impact strength, notched (-20 °C)	5	kJ/m²	ISO 179-1/1eA

* Data should not be used for specification work

Processing techniques

BA160E-8229-01 is easy to process with standard injection molding machines. Following parameters should be used as guidelines:

Processing setting	Typical value/range
Melt temperature	230-260 °C
Holding pressure	as low as possible
Mold temperature	10-40 °C

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

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BA160E-8229-01

Packaging and storage

BA160E-8229-01 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.

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 and www.borealiseverminds.com.

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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