

Polyethylene

Purpolen™ PE

Post-Consumer Recyclate



Description

Purpolen™ PE is a grey polyethylene post-consumer recyclate supplied in pellets. This product is an ideal PE used where sustainability and circularity matter. It is a post-consumer recyclate including a large part of recycled post-consumer waste coming from pre-sorted municipality waste. It is a part of EuCertPlast certificate according to European Standard EN15343:2007 (certificate available upon request).

It is not intended for use in beverages, drinking water contact, food contact, medical, pharmaceutical or healthcare applications. Due to the nature of recyclates, some variation in colour can be observed between batches.

Homogenised 24 tonne- truckloads

Pellet shape: cylindrical

Pore size of filter: 180 µm

Applications

Blow moulding

Special Features

Good impact behaviour

Good demoulding properties

Physical Properties

Property	Typical Value	Test Method
<small>Data should not be used for specification work</small>		
Density	955 kg/m ³	ISO 1183
Melt Flow Rate (190 °C/2,16 kg)	0,6 g/10min	ISO 1133
Tensile Modulus (1 mm/min)	900 MPa	ISO 527-2
Tensile Stress at Yield (50 mm/min)	24 MPa	ISO 527-2
Charpy Impact Strength, notched (23 °C)	15,0 kJ/m ²	ISO 179/1eA
Moisture content (105 °C)	< 0,1 %	Moisture analyser (infrared)
Ash content (650 °C) ¹	<= 2 %	ISO 1172

¹ Refers to filler content

Processing Techniques

This product is easy to process with standard extrusion conditions.

Following parameters should be used as guidelines:

Melt temperature	170 - 200 °C	
Holding pressure	200 - 500 bar	Minimum to avoid sink marks.
Mould temperature	30 - 40 °C	

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

Purpolen is a trademark of the Borealis group.

mtm plastics GmbH | Bahnhofstraße 106 | D-99759 Niedergebra | Germany
 Tel. +49 (0) 36338 / 325-0 | Fax +49 (0) 36338 / 325-25
 info@mtm-plastics.eu | www.mtm-plastics.eu



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Storage

Purpolen PE 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 this product.

Safety

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

Disclaimer

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