

Post-Consumer Recyclate

Purpolen™ PE FF-74

High Density Polyethylene



Accelerating Action  
on Circularity

Description

Purpolen™ PE FF-74 is a dark grey polyethylene (PE) post-consumer recyclate supplied in pellet form. This product is an ideal PE used where sustainability and circularity matter. Purpolen™ PE FF-74 is a 100% post-consumer recyclate including a large part of recycled post-consumer plastic waste coming from pre-sorted municipal (household) waste. It is a part of EuCertPlast certificate according to European Standard EN15343:2007 (certificate available upon request).

Due to the nature of recyclates, some variation in colour can be observed between batches.

Good demoulding properties

Filtration: 100 µm

Available in homogenized 24-ton truckloads

Applications

Purpolen™ PE FF-74 is intended for following applications:

Injection moulding applications

Physical properties

Property	Typical value *	Unit	Test method
Density	955	kg/m³	ISO 1183
Melt flow rate (190 °C/2.16 kg)	1	g/10min	ISO 1133
Moisture content	<0.1	%	Moisture analyzer (infrared)
Ash content (950°C) <sup>1</sup>	<2	%	ISO 1172
Tensile modulus (1 mm/min)	900	MPa	ISO 527-2
Tensile stress at yield (50 mm/min)	22	MPa	ISO 527-2
Charpy impact strength, notched (23 °C)	15	kJ/m²	ISO 179-1/1eA

<sup>1</sup> Refers to filler content

\* Data should not be used for specification work

Processing techniques

This product is easy to process with standard injection molding machines.

Following parameters should be used as a guideline:

Processing setting	Typical value/range
Melt temperature <sup>2</sup>	190 °C
Mould temperature <sup>3</sup>	35 °C
Holding pressure <sup>4</sup>	350 bar

<sup>2</sup> Range: 170 - 200 °C

<sup>3</sup> Range: 30 - 50 bar

<sup>4</sup> Range: 200- 500 °C

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### Packaging and storage

Purpolen™ PE FF-74 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 odor generation and color changes and can have negative effects on the physical properties of this product. The shelf life is a maximum of one year after production. The shelf life of a product can be extended after properties are re-testing selected material properties and verifying that the test results are still within the product specification. It is recommended to measure the moisture after longer storage periods prior to processing.

### 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](http://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](http://www.borealisgroup.com) and [www.borealiseverminds.com](http://www.borealiseverminds.com).

### Disclaimer

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