

Polypropylene

Purpolen™ PP Y55-71

Post-Consumer Recyclate



Accelerating Action
on Circularity

Description

Purpolen™ PP Y55-71 is a light colour polypropylene (PP) post-consumer recyclate available supplied in pellets. This product is an ideal PP, 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). Due to the nature of recyclates, some variation in colour can be observed between batches.

Cas No. 9003-07-0

Typical characteristics

Purpolen™ PP Y55-71 can be described with following typical characteristics:

Good stiffness / impact balance and low odour Available in homogenised 24 ton truckloads
 Good demoulding properties Filtration: 180µm

Applications

Purpolen™ PP Y55-71 is intended for following applications:

Injection-moulded non-food applications

Physical properties

Property	Typical value *	Unit	Test method
Density	915	kg/m³	ISO 1183
Melt flow rate (230 °C/2.16 kg)	55	g/10min	ISO 1133-1
Moisture content (105°C) ¹	<0.1	ppm	Internal Test Method
Ash content (650°C) ²	<=2%	%	ISO 1172
Tensile modulus (1 mm/min)	1200	MPa	ISO 527-2
Tensile stress at yield (50 mm/min)	24	MPa	ISO527-2
Charpy impact strength, notched (23 °C)	5.5	kJ/m²	ISO 179-1/1eA

* Data should not be used for specification work

¹ infrared

² refers to filler content

Processing techniques

This product is easy to process with standard injection moulding machines. Following parameters should be used as a guideline:

Processing setting	Typical value/range
Melt temperature ³	230 °C
Holding pressure ⁴	350 bar
Mould temperature ⁵	35 °C

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³ range: 210 - 260 °C

⁴ range: 200 - 500 bar

⁵ range: 30 - 40 °C

Injection speed: High

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

Packaging and storage

Purpolen™ PP Y55-71 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

Recycled plastics are subject to material inconsistencies. mtm/Ecoplast makes no warranties which extend beyond the description contained herein and to the best of our knowledge, the information is accurate and reliable as of the date of publication. Because of the multitude of possible influences during the use and application of our products, the information included does not release customers and users from the obligation to examine and test them carefully. Please note that nothing herein shall constitute any warranty of merchantability or fitness for a particular purpose. It is the customer's responsibility to inspect and test our products in order to satisfy itself as to the suitability of the products for the customer's particular purpose as mtm/Ecoplast do not know the origin of the product. Where necessary, the customer is recommended to obtain a feedstock release from the customer. The customer is responsible for the appropriate, safe and legal use, processing and handling of our products. No liability can be accepted in respect of the use of any mtm/Ecoplast product in conjunction with any other products and/or materials. The information contained herein relates exclusively to our products when not used in conjunction with any other material unless as specifically provided for in the test methods stated above. The product(s) mentioned herein are not intended to be used for food contact, drinking water contact, medical, pharmaceutical or healthcare applications and we do not support their use for such applications. Otherwise, our General Terms and Conditions of Sale apply.