

Polypropylene

Purpolen™ PP-89

Post-Consumer Recyclate



Accelerating Action
on Circularity

Description

Purpolen™ PP-89 is an anthracite polypropylene (PP) post-consumer recyclate 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.

Good stiffness / impact balance and low odour
Good demoulding properties

Available in homogenised 24-ton truckloads
Filtration: 180µm

Applications

Purpolen™ PP-89 is intended for following applications:

Injection-moulded non-food applications

Physical properties

| Property | Typical value * | Unit | Test method |
|--|-----------------|-------------------|------------------------------|
| Density | 915 | kg/m ³ | ISO 1183 |
| Melt flow rate (230 °C/2.16 kg) | 20 | g/10min | ISO 1133 |
| Ash content (950°C) ¹ | <5 | % | ISO 1172 |
| Moisture content | <0.1 | % | Moisture analyzer (infrared) |
| Tensile modulus (1 mm/min) | 1200 | MPa | ISO 527-2 |
| Tensile stress at yield (50 mm/min) | 24 | MPa | ISO 527-2 |
| Charpy impact strength, notched (23 °C) | 5.5 | kJ/m ² | ISO 179-1/1eA |

¹ Refers to filler content

* Data should not be used for specification work

Processing techniques

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

| Processing setting | Typical value/range |
|--------------------------------|---------------------|
| Melt temperature ² | 230 °C |
| Holding pressure ³ | 350 bar |
| Mould temperature ⁴ | 35 °C |

² range: 210 - 260 °C

³ range: 200 - 500 bar

⁴ range: 30 - 40 °C

Injection speed: High
Shrinkage 1 - 2%, depending on wall thickness and moulding parameters

Packaging and storage

Purpolen™ PP-89 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.

Purpolen™ is a trademark of the Borealis Group

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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

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