

Polyethylene

NAV112

Post-Consumer/Post-Industrial Recyclate



Accelerating Action
on Circularity

Description

NAV112 is a black post-consumer/post-industrial polyethylene recyclate (rPE) supplied in pellet form for pipe applications. NAV112 is an ideal PE used where sustainability and circularity matter. The post-consumer recyclate includes post-consumer waste coming from pre-sorted municipal household waste, the post-industrial recyclate consists of post-industrial waste from Borealis plants. Due to the nature of recyclates, some variation in colour can be observed between batches.

Cas No. 9002-88-4

Typical characteristics

NAV112 can be described with following typical characteristics:

Approximately 40% High Density Polyethylene post-industrial recyclate Available in homogenised 24-ton truckloads
 Black (includes black colour masterbatch) Filtration: 100 µm
 Pellet shape: lenticular

Applications

NAV112 is intended for following applications:

- Pipes for home irrigation use
- Pipes for irrigation in agriculture
- Sewage or disgust pipes
- Corrugated pipes
- Cable routings

Physical properties

Property	Typical value *	Unit	Test method
Density	0.950	g/cm ³	ISO 1183-1
Melt flow rate (190 °C/2.16 kg)	0.4	g/10 min	ISO 1133-1
Melt flow rate (190 °C/5 kg)	1.6	g/10 min	ISO 1133-1
Bulk density	520	g/l	ISO 60
Moisture content ¹	≤ 0.06	%	
Hardness, Shore D	54	-	ISO 868

* Data should not be used for specification work

¹ internal method

Processing techniques

NAV112 is easily processed on conventional extruders. Following extrusion parameters should be used as guideline:

Processing setting	Typical value/range
Melt temperature	160 - 190 °C

Due to differences in screw and die head designs the optimum temperature adjustments are individual and should be evaluated for each production line.

Packaging and storage

NAV112 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.

Polyethylene

NAV112

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/Exocplast 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/Exocplast 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/Exocplast 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.