

Polyethylene

NAV113



Accelerating Action  
on Circularity

Description

NAV113 is a black post-consumer/post-industrial polyethylene recyclate (rPE) supplied in pellet form for pipe applications. NAV113 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 between batches can be observed.

Cas No. 9002-88-4

Typical characteristics

NAV113 can be described with following typical characteristics:

Approximately 30% High Density Polyethylene post-industrial recyclate Available in homogenised 24-ton truckloads  
 Black (includes black colour masterbatch) Filtration: 100 µm  
 Pellet shape: lenticular

Applications

NAV113 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 <sup>3</sup>	ISO 1183
Melt flow rate (190 °C/2.16 kg)	0.5	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 <sup>1</sup>	≤ 0.06	%	
Hardness, Shore D	54	-	ISO 868

\* Data should not be used for specification work

<sup>1</sup> internal method

Processing techniques

NAV113 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

NAV113 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.

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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](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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