INEOS Olefins & Polymers Europe

Recycl-IN rHD5402

Recycl-IN

DATA SHEET

Product Technical Information

High density polyethylene resin containing at least 50% weight of post-consumer recyclate.

Benefits & Features

Recycl-IN rHD5402 is a ready to use high density polyethylene grade containing at least 50% post- consumer recyclate and supplied in pellet form. It has an outstanding stiffness and environmental stress crack resistance (ESCR) balance making it ideal for use in a wide range of blow moulding applications. The grade is particularly well suited to chemical and detergent packaging as the exceptional ESCR can allow for significant bottle weight reduction.

/ High rigidity
/ Outstanding environmental stress cracking resistance
/ High impact strength
/ Easy processing

Applications

/ Blow moulded containers up to 10 litres capacity for packaging chemicals, many household products and oils. This grade is not suitable for food packaging or pharma/medical applications
/ Sheet extrusion

Storage

The product should be stored in a dry and dust free environment at temperature below 50°C.
Exposure to direct sunlight should be avoided as this may lead to product deterioration.
It is advised to process the product within maximum one year after delivery.

Disclaimer

Although **Recycl-IN™** compounds offer Polyethylene virgin-like characteristics, they contain high levels of mechanically recycled post-consumer waste and, therefore, are not free from any gel, black spot, or other impurities. INEOS O&P Europe is taking all possible measures to avoid or minimise the presence of these defects but cannot guarantee their total absence.

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Properties	Conditions	Test Methods	Values	Units
Physical				
Melt Flow Rate	190°C/2.16Kg	ISO 1133-1	0.2	g/10min
Density		ISO 1183-1 & ISO 17855-1	954	kg/m³
Mechanical				
Tensile Strength at Yield	23°C, Type 1 BA	ISO 527-2	27	MPa
Elongation at break	23°C, Type 1 BA	ISO 527-2	>300	%
Flexural Modulus	23°C	ISO 178	1100	MPa
Charpy Impact Strength	23°C	ISO 179	12	kJ/m2
FNCT	50°C, 2% Arkopal N100, 5MPa	ISO 16770	>45	hours
BTT stress crack resistance	F50 at 50°C, 100% concentration	ASTM D 1693	>200	hours

Data should not be used for specification work

REGULATORY INFORMATION

The product and uses described herein may be subject to specific requirements or limitations for use in certain applications like food contact, drinking water or medical devices. Further information may be obtained from the website www.ineos.com where a specific Regulatory Certificate is available for each grade under the heading “SDS & Regulatory Certificate”.

Unless specifically indicated, the product mentioned herein is not suitable for applications in the medical or pharmaceutical

sectors. HEALTH AND SAFETY INFORMATION

The product described herein may require precautions in handling. The available product health and safety information for this material is contained in the Safety Data Sheet (SDS) that may be obtained from the website www.ineos.com. Before using any material, a customer is advised to consult the SDS for the product under consideration for use.

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