INEOS Olefins & Polymers Europe

# Recycl-IN rHD5603

Recycl-IN

plastic second life MIX ECO

## DATA SHEET

## Product Technical Information

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

## Benefits & Features

**Recycl-IN rHD5603** is a pearl, ready to use high density polyethylene grade containing 50% post consumer recyclate and supplied in pellet form. It has an outstanding stiffness and good environmental stress crack resistance (ESCR) balance making it ideal for use in a wide range of blow moulding applications.

/ High rigidity
/ Good 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.
/ Sheet extrusion

This grade is not suitable for food packaging or pharma/medical applications

## 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 | 0.3 | g/10min |
| Density | | ISO 1183-1 & ISO 17855-1 | 956 | kg/m³ |
| **Mechanical** | | | | |
| Tensile Strength at Yield | 23°C, Type 1 BA | ISO 527-2 | 32 | MPa |
| Elongation at break | 23°C, Type 1 BA | ISO 527-2 | 700 | % |
| Flexural Modulus | 23°C | ISO 178 | 1350 | MPa |
| Notched Charpy Impact Strength | 23°C | ISO 179 | 9 | kJ/m2 |
| FNCT | 50°C, 2% Arkopal N100, 5MPa | ISO 16770 | 25 | hours |
| BTT stress crack resistance | F50 at 50°C, 100% concentration | ASTM D 1693 | >90 | 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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