# RIGIDEX® HD5802BM-R

## Product Technical Information

Polyethylene bimodal medium molecular weight copolymer

## Benefits & Features

**RIGIDEX® HD5802BM-R** is a new bimodal medium molecular weight copolymer grade 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 liters capacity for packaging chemicals, many household products, oils and foodstuffs
- Sheet extrusion
- Blow moulded containers for the packaging of medical and pharmaceutical applications

| Properties | Conditions | Test Methods | Values | Units |
|---|---|---|---|---|
| **Rheological** | | | | |
| Melt Flow Rate | 190°C/2.16Kg | ISO 1133-1 | 0.3 | g/10min |
| **Physical** | | | | |
| Density | | ISO 1183-1 & ISO 1872-1 | 956.5 | kg/m³ |
| **Mechanical** | | | | |
| Tensile Strength at Yield | 23°C, 50 mm/min | ISO 527-1,-2 | 27 | MPa |
| Tensile Strain at Break | 23°C, 50 mm/min | ISO 527-1,-2 | >300 | % |
| Flexural Modulus | 23°C at 100 mm/min | ISO 178 | 1150 | MPa |
| Charpy Notched Impact Strength | +23°C, method 1eA | ISO 179-1 | 12(1) | kJ/m² |
| BTT stress crack resistance | F50 at 50°C, 100% concentration | ASTM D 1693 | >200 | h |

**Data should not be used for specification work**

(1) No total failure

May, 2024

Published by

INEOS Olefins & Polymers Europe

# RIGIDEX® HD5802BM-R

## 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.


### 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.

### Exclusion of Liability

Although INEOS O&P Europe endeavours to ensure that all information and advice relating to our materials or other materials howsoever provided to you by INEOS O&P Europe is accurate and up to date, no representation or warranty, express or implied is made by INEOS O&P Europe as to its accuracy or completeness. All such information and advice is provided in good faith and INEOS O&P Europe is not, to the maximum extent permitted by law, liable for any action you may take as a result of relying on such information or advice or for any loss or damage, including any consequential loss, suffered by you as a result of taking such action.

In addition data and numerical results howsoever provided to you by INEOS O&P Europe are given in good faith and are general in nature. Data and numerical results are not and shall not be regarded as specifications and as such INEOS O&P Europe is not, to the maximum extent permitted by law, liable for any action that you take as a result of relying on such data and results or for any loss or damage, including any consequential loss, suffered by you as a result of taking such action.

It remains at all times your responsibility to ensure that INEOS O&P Europe materials are suitable for the particular purpose intended and INEOS O&P Europe shall not be responsible for any loss or damage caused by misuse of INEOS O&P Europe products. To the maximum extent permitted by law, INEOS O&P Europe accepts no liability whatsoever arising out of the application, adaptation or processing of the products described herein, the use of other materials in lieu of INEOS O&P Europe materials or the use of INEOS O&P Europe materials in conjunction with such other materials.


May, 2024

Published by

INEOS Olefins & Polymers Europe