# RIGIDEX® HM5119BM

## Product Technical Information

**RIGIDEX® HM5119BM** is a bimodal High Density Polyethylene copolymer manufactured by INEOS Olefins & Polymers Europe using its proprietary supported catalyst & process. It is particularly intended for extrusion process and for blow molding applications requiring very high environment stress cracking resistance.

### Benefits and Features

- Very high environmental stress crack resistance
- Good rigidity
- High impact strength

## Applications

- Blow moulded containers and bottles up to 10 liters capacity for packaging chemicals, many household products
- Robust industrial and technical moldings requiring very high ESCR such as windshield washer tank
- Telecommunication conduits
- General extrusion

| Properties | Conditions | Test Methods | Values | Units |
|---|---|---|---|---|
| **Physical** | | | | |
| Density | 23°C | ISO 1183-1 & ISO 1872-1 | 951 | kg/m³ |
| Melt Flow Rate | 190°C/2.16 kg | ISO 1133-1 | 0.25 | g/10min |
| | 190°C/5 kg | ISO 1133-1 | 1.0 | g/10min |
| | 190°C/21.6kg | ISO 1133-1 | 20 | g/10min |
| **Mechanical**(1) | | | | |
| Flexural Modulus | 23°C | ISO 178 | 1100 | MPa |
| Tensile Strength at Yield | 23°C | ISO 527-1,-2 | 26.5 | MPa |
| Izod Impact Strength, notched | 23°C | ISO 180/A | 12 | |
| Izod Impact Strength, notched | -30°C | ISO 180/A | 6 | kJ/m² |
| Charpy Impact Strength | -20°C | ISO 179 | 6.5 | kJ/m² |
| BTT Stress Crack Resistance | (F50 @ 50°C, 10% Igepal concentration) | ASTM D 1693B | >150 | h |
| **Thermal** | | | | |
| Melting point | DSC | ISO 11357-3 | 131 | °C |
| Heat Deflection Temperature | 0.45 MPa (HDT/B) | | 79 | °C |
| Vicat Softening Point | 10N | ISO306/A50 | 125 | °C |

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

(1) Measured on compression moulded plaques

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## 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.

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