



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/m ³
	190°C/2.16 kg	ISO 1133-1	0.25	g/10min
Melt Flow Rate	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/m ²
Charpy Impact Strength	-20°C	ISO 179	6.5	kJ/m ²
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

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.