



# RIGIDEX<sup>®</sup> HM5420XPHi

## Product Technical Information

**RIGIDEX<sup>®</sup> HM5420XPHi** is a high density polyethylene material with high molecular weight intended for blow molding of large containers.

**RIGIDEX<sup>®</sup> HM5420XPHi** has been especially designed to improve the impact strength of such containers.

It is supplied in a specially stabilized pellet form.

## Benefits & Features

- Enhanced impact strength
- Extremely smooth surface aspect
- High melt strength
- High environmental stress crack resistance
- High rigidity
- Very good heat stabilization

## Applications

Large blow moulded articles requiring high stiffness and high impact strength including UN and RID/ADR approved containers for the packaging and transportation of dangerous goods.

Properties	Conditions	Test Methods	Values	Units
<b>Physical</b>				
Density ISO 1872-1	23°C	ISO 1183-1	954	kg/m <sup>3</sup>
<b>Rheological</b>				
Melt Flow Rate	190°C/21.6 kg	ISO 1133-1	2.1	g/10min
<b>Mechanical</b>				
Flexural Modulus	23°C	ISO 178	1400	MPa
Tensile Strength at Yield	23°C, 50 mm/min	ISO 527-1,-2	30	MPa
Tensile Strain at Break	23°C, 50 mm/min	ISO 527-1,-2	>600	%
Charpy Notched Impact Strength	-30°C, method 1eA	ISO 179-1	70 <sup>(1)</sup>	kJ/m <sup>2</sup>
Stress crack resistance FNCT	9 MPa, 50°C	ISO 16770	9	h

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

<sup>(1)</sup> No total failure

## 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.