



# RIGIDEX<sup>®</sup> HM5420XPH

## Product Technical Information

**RIGIDEX<sup>®</sup> HM5420XPH** is a high molecular weight grade with enhanced impact strength, supplied as a specially stabilised pellet for use in large blow moulding.

## Benefits & Features

- Extremely high impact strength
- High melt strength
- High environmental stress crack resistance
- Excellent rigidity
- Very good heat stabilization

## Applications

Large blow moulded articles requiring high stiffness and exceptional toughness including UN and RID/ADR approved containers for the packaging of dangerous goods

Properties	Conditions	Test Methods	Values	Units
<b>Physical</b>				
Density ISO 1872-1	23°C	ISO 1183-1	953	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	1300	MPa
Tensile Strength at Yield	23°C, 50 mm/min	ISO 527-1,-2	28	MPa
Tensile strain at Break	23°C, 50 mm/min	ISO 527-2	>600	%
Charpy Notched Impact Strength	-30°C	ISO 179-1/1eA	50 <sup>(1)</sup>	kJ/m <sup>2</sup>
Stress crack resistance BTI	10% Igepal, 50°C	ASTM D1693-B	100	hours
Stress crack resistance FNCT	9 MPa, 50°C	ISO 16770	10	hours

**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.