RIGIDEX® HM5420XPHi

Product Technical Information

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

RIGIDEX® 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
Physical				
Density ISO 1872-1	23°C	ISO 1183-1	954	kg/m³
Rheological				
Melt Flow Rate	190°C/21.6 kg	ISO 1133-1	2.1	g/10min
Mechanical				
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 (1)	kJ/m²
Stress crack resistance FNCT	9 MPa, 50°C	ISO 16770	9	h
Data should not be used for specification work				

(1) No total failure

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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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