



HBM 5520

High Density Polyethylene

Product Description

HBM 5520 is a high density polyethylene with medium molecular weight. This grade which is produced by 1-hexene as a co-monomer, offer excellent combination of toughness, stress cracking resistance, good mechanical properties and good process-ability. HBM 5520 is recommended for multipurpose blow molding process. HBM 5520 has been manufactured under Basell license.

General Information

Status	Commercial: Active	
Application	Multipurpose blow molding process- Small blow molded articles- Containers for household and industrial chemicals- Automotive supplies- Foodstuffs- Toiletries and cosmetics.	
Form(s)	Pellet	
Attribute	Good ESCR Good Process-ability	Good stiffness and toughness
Additives	Antioxidant: Yes Processing Aid: No	Antiblock: No Slip Agent: No

Typical Properties	Typical Value ¹	Unit	Test Method
Physical			
High Load Melt Flow Index (190°C/ 21.6 kg)	23	g/10 min	ISO 1133
Melt Flow Index (190°C/ 2.16 kg)	0.25	g/10 min	ISO 1133
Density ²	0.955	g/cm ³	ISO 1183
Bulk Density	> 0.50	g/cm ³	ISO 60
Mechanical ³			
Tensile Modulus of Elasticity	1200	MPa	ISO 527-1,2
Tensile Stress at Yield	28	MPa	ISO 527-1,2
Tensile Strain at Yield	9	%	ISO 527-1,2
Tensile Impact Strength (Notched, Type 1, Method A, -30°C)	110	kJ/m ²	ISO 8256
Ball Indentation Hardness (H 132/30)	51	MPa	ISO 2039-1

ESCR	30	hr	Basell method
FNCT (3.5 MPa, 2% Arkopal N100, 80°C)	4.5	hr	ISO 16770
Thermal			
Deflection Temperature Under Load (0.45 MPa)	83	°C	ISO 75
Deflection Temperature Under Load (1.8 MPa)	45	°C	ISO 75
Melting Temperature	135	°C	ISO 3146
Vicat Softening Temperature (Method B/ 50N)	79	°C	ISO 306
Recommended Process Conditions ⁴			
Extruder Barrel Temperature: 180-210 °C		Melt Temperature: 200-225 °C	
Processing Method: Extrusion Blow Molding; Thermoforming			

1. Typical values: these are not to be construed as specifications.
2. The density parameter was determined on compression-molded specimens, which were prepared in accordance with procedure C of ASTM D4703, Annex A1.
3. Properties are based on compression-molded specimens, which were prepared in accordance with procedure B of ASTM D4703, Annex A1, using 100% HBM5520 resin.
4. Please note that, these processing conditions are recommended by manufacturer only for 100% HBM 5520 resin (not in the case of blending with any other compatible material), therefore because of the many particular factors which are outside our current knowledge and control and may affect the use of product, no warranty is given for the foregoing data. Moreover, the specific recommendations for resin type and processing conditions can only be made when the end use, required properties and fabrication equipment are known.

Contact Us

Tel : +982177784838 / +989122050173

Email: info@irplastics.com

<https://irplastics.com>