

BM1052

High Density Polyethylene for Blow molding

Product Description

BM1052 grade is high molecular weight High Density Polyethylene copolymer with broad molecular weight distribution. It has excellent processability and exhibits very high impact strength, stiffness and superior environmental stress crack resistance.

Typical Applications

BM1052 resin is intended for blow molding of large containers such as closed head shipping containers, fuel tanks and containers for industrial use. It can also be extruded into sheets giving exceptionally high impact strength.

Typical data

Properties	Unit	Value (1)	Test Method
Melt Flow Rate @ 190°C & 2.16 kg load @ 190°C & 5 kg load @ 190°C & 21.6 kg load	g/10 min.	0.05 0.38 10	ASTM D 1238
Density @ 23°C	kg/m^3	952	ASTM D 1505
Mechanical Properties (2)			
1% Secant Modulus	MPa	1000	ASTM D 638
Tensile Strength @ Yield	MPa	27	ASTM D 638
Tensile Strength @ Break	MPa	18	ASTM D 638
Tensile Elongation @ Break	%	>500	ASTM D 638
Flexural Strength	MPa	26	ASTM D 790
Flexural Modulus	MPa	1050	ASTM D 790
Izod Impact	J/m	300	ASTM D 256
Hardness (Shore D)	-	63	ASTM D 2240
ESCR (10% Igepal), F_{50}*	Hrs	>1200	ASTM D 1693B
ESCR (10% Igepal), F_{50}*	Hrs	720	ASTM D 1693B
Thermal Properties			
Vicat Softening Point	°C	125	ASTM D 1525
Brittleness Temperature	°C	< -75	ASTM D 746

(1) Typical values; not to be construed as specification limits.
(2) Based on Compression molded sheet

Processing Conditions
Typical processing conditions for BM1052 are:
Barrel temperature: 200 - 250°C
Melt temperature: 200 - 230°C

Food Regulation

BM1052 grade is not intended for Food contact application. Detailed information is provided in relevant Material Safety Datasheet and for additional specific information please contact SABIC local representative for certificate.

Storage and Handling

Polyethylene material should be stored in a manner to prevent a direct exposure to sunlight and/or heat. The storage area should also be dry and preferably don't exceed 50°C. SABIC would not give warranty to bad storage conditions which may lead to quality deterioration such as color change, bad smell and inadequate product performance. It is advisable to process PE resin within 6 months after delivery.

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