SABIC® HDPE BM1052J

HIGH DENSITY POLYETHYLENE

DESCRIPTION

BM1052J is a high molecular weight TNPP free High Density Polyethylene copolymer grade with broad molecular weight distribution. It has excellent process ability and exhibits very high impact strength, stiffness and superior environmental stress crack resistance.

TYPICAL APPLICATIONS

BM1052J resin is intended for blow molding of large containers such as closed head shipping containers and containers for industrial use. It can also be extruded into sheets giving exceptionally high impact strength.

TYPICAL PROPERTY VALUES

Revision 20260206

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
POLYMER PROPERTIES (1)			
Melt Flow Rate (MFR)			
@ 190°C & 21.6 kg	10	g/10 min	ASTM D1238
@ 190°C and 5 kg	0.38	g/10 min	ASTM D1238
Density			
@ 23°C	952	kg/m³	ASTM D1505
MECHANICAL PROPERTIES (2)			
1% Secant Modulus	1200	MPa	ASTM D638
Tensile strength			
@ Yield	28	MPa	ASTM D638
@ Break	14	MPa	ASTM D638
Tensile Elongation at Break	>500	%	ASTM D638
Flexural Strength	27	MPa	ASTM D790
Flexural Modulus	905	MPa	ASTM D790
Izod Impact Strength	270	J/m	ASTM D256
Hardness (Shore D)	58	-	ASTM D2240
ESCR (100% Igepal), F50 (3)	>500	Hrs	ASTM D1693B
THERMAL PROPERTIES (1)			
Vicat Softening Point	127	°C	ASTM D1525
Brittleness Temperature	<-75	°C	ASTM D746

(1) Typical values: not to be construed as specification limits.
(2) Based on compression molded sheet
(3) Based on compression molded sheet

PROCESSING CONDITIONS

Typical processing conditions for BM1052J are:

Barrel temperature: 200-250°C (390-480°F) Mold temperature: 15-60°C (60-140°F)

© 2026 Copyright by SABIC. All rights reserved

CHEMISTRY THAT MATTERS™

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 do not 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.

DISCLAIMER

Any sale by SABIC, its subsidiaries and affiliates (each a "seller"), is made exclusively under seller's standard conditions of sale (available upon request) unless agreed otherwise in writing and signed on behalf of the seller. While the information contained herein is given in good faith, SELLER MAKES NO WARRANTY, EXPRESS OR IMPLIED, INCLUDING MERCHANTABILITY AND NONINFRINGEMENT OF INTELLECTUAL PROPERTY, NOR ASSUMES ANY LIABILITY, DIRECT OR INDIRECT, WITH RESPECT TO THE PERFORMANCE, SUITABILITY OR FITNESS FOR INTENDED USE OR PURPOSE OF THESE PRODUCTS IN ANY APPLICATION. Each customer must determine the suitability of seller materials for the customer's particular use through appropriate testing and analysis. No statement by seller concerning a possible use of any product, service or design is intended, or should be construed, to grant any license under any patent or other intellectual property right.

© 2026 Copyright by SABIC. All rights reserved