

## POLYMERS

# SABIC<sup>®</sup> HDPE Blow molding BM1052

## 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 <sup>(1)</sup>	Test Method
Melt Flow Rate			
@ 190°C & 2.16 kg load	g/10 min	0.05	ASTM D 1238
@ 190°C & 5 kg load		0.38	
@ 190°C & 21.6 kg load		10	
Density @ 23°C	Kg/m3	952	ASTM D 1505
<b>MECHANICAL PROPERTIES <sup>(2)</sup></b>			
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 (100% Igepal), F50	Hrs	>1200	ASTM D 1693B
ESCR (10% Igepal), F50	Hrs	720	ASTM D 1693B
<b>THERMAL PROPERTIES</b>			
Vicat Softening Point	°C	125	ASTM D 1525
Brittleness Temperature	°C	< -75	ASTM D 746