

SABIC® HDPE B1054M

PROVISIONAL TECHNICAL DATA SHEET HIGH DENSITY POLYETHYLENE

DESCRIPTION

B1054M is a High Density Polyethylene specially developed for blow molding and jerry cans. The material offers high stiffness, good processability and excellent combination of stiffness and ESCR with good impact resistance.

TYPICAL APPLICATIONS

B1054M is specially designed for standard jerry cans for the packaging of dangerous goods, Light weight jerry cans and UN approved jerry cans.

TYPICAL PROPERTY VALUES

Revision 20230320

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
POLYMER PROPERTIES ⁽¹⁾			
Melt Flow Rate (MFR)			
at 190°C and 5 kg load	0.43	g/10 min	ISO 1133
at 190°C and 21.6 kg load	9.5	g/10 min	ISO 1133
FRR (MFR 21.6kg/MFR 5kg)	22	-	ISO 1133
Density			
@23°C	954	kg/m ³	ISO 1183
MECHANICAL PROPERTIES ⁽²⁾			
Tensile modulus	1200	MPa	ISO 527
Tensile impact test			
Tensile Impact Strength (23°C, Notched)	145	kJ/m ²	ISO 8256
Tensile Impact Strength at -30°C (Notched)	≥60	kJ/m ²	ISO 8256
Charpy impact strength @ -30°C	7	kJ/m ²	ISO 179/1eU
FNCT (3.5 MPa, 2 % Igepal BC/9, 80°C)	>18	Hrs	ISO 16770

(1) Typical values: not to be construed as specification limits.

(2) Based on compression molded sheet. Compression moulding of test specimen according to ISO 1872-2 Conditioning of test specimen: temp, 23 °C, relative humidity 50 %, 24 hours

PROCESSING CONDITIONS

Recommended processing temperature: 180 - 220 °C

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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CHEMISTRY THAT MATTERS™

