

# SABIC® HDPE B1054

#### HIGH DENSITY POLYETHYLENE

#### **DESCRIPTION**

B1054 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/ESCR.

# **TYPICAL APPLICATIONS**

B1054 is specially designed for standard jerry cans, Light weight jerry cans and UN approved jerry cans. The grade can be used in food contact applications.

## **TYPICAL PROPERTY VALUES**

Revision 20230113

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
POLYMER PROPERTIES (1)			
Melt Flow Rate (MFR)			
at 190°C and 5 kg load	0.45	g/10 min	ISO 1133
at 190°C and 21.6 kg load	9.5	g/10 min	ISO 1133
Density at 23°C (1)	954	kg/m³	ASTM D1505
MECHANICAL PROPERTIES (2)			
Tensile modulus	1250	MPa	ASTM D638
Tensile Stress at Yield	27	MPa	ISO 527-1/-2
Tensile Strain at Yield	10	%	ISO 527-1/-2
Tensile Impact Strength at -30°C (Notched)	90	kJ/m²	ISO 8256
Hardness (Shore D)	62	-	ASTM D2240
FNCT (3.5 MPa, 2 % Igepal BC/9, 80°C)	40	Hrs	ISO 16770

<sup>(1)</sup> Typical values: not to be construed as specification limits.

# 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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<sup>(2)</sup> 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