

SABIC® HDPE B5403

HIGH DENSITY POLYETHYLENE

DESCRIPTION

B5403 is a High Density Polyethylene specially developed for blow molding / Jerry cans and drums. The material offers an excellent combination of stiffness and ESCR and a high Impact resistance. This grade can be used in food contact applications.

TYPICAL APPLICATIONS

B5403 is specially designed for standard jerry cans, UN approved jerry cans, standard drums, L-ring drums for packaging of dangerous goods and UN approved open top drums. This grade can be used in food contact applications.

TYPICAL PROPERTY VALUES

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
POLYMER PROPERTIES			
Melt Flow Rate (MFR)			
190°C & 21.6 kg load ⁽¹⁾	2.6	g/10 min	ISO 1133
Density at 23°C ⁽¹⁾	954	kg/m ³	ASTM D1505
MECHANICAL PROPERTIES			
Tensile modulus ⁽²⁾	1200	MPa	ASTM D638
Tensile Strength at Yield	27	MPa	ASTM D638
Tensile Strain at Yield	8	%	ISO 527-1/-2
Tensile Impact Strength at -30°C (Notched)	290	kJ/m ²	ISO 8256
Charpy Notched Impact Strength (-30°C, Type 1, Notch A)	80	kJ/m ²	ISO 179
FNCT (3.5 MPa, 2 % Igepal BC/9, 80°C)	14	Hrs	ISO 16770

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

(2) Based on compression molded sheet.

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.