SABIC® HDPE B5822M

PROVISIONAL TECHNICAL DATA SHEET HIGH DENSITY POLYETHYLENE

DESCRIPTION

HDPE B5822M is a High Density Polyethylene specially developed for small blow molded bottles. The material offers easy flow, higher stiffness, very good ESCR and sufficient impact strength. It exhibits a very good combination of high stiffness and high stress cracking resistance. HDPE B5822M demonstrates good organoleptic properties and has a broad molecular weight distribution.

TYPICAL APPLICATIONS

B5822M is specially designed for small blow molded bottles applications (<10 L) for packaging of consumer goods, Bottles for Industrial use, Jerry Cans, Sports, Leisure & Toys.

TYPICAL PROPERTY VALUES

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
POLYMER PROPERTIES [1]			
Melt Flow Rate (MFR)			
at 190°C and 2.16 kg	0.35	g/10 min	ISO 1133
at 190°C and 5 kg	1.2	g/10 min	ISO 1133
at 190°C and 21.6 kg	22	g/cm³	ISO 1133
Density			
@23°C	0.958	kg/m³	ISO 1183
MECHANICAL PROPERTIES [2]			
Tensile modulus	1350	MPa	ISO 527
Tensile Impact Strength at -30°C (Notched)	75	kJ/m²	ISO 8256
Charpy Notched Impact Strength (-30°C, Type 1, Notch A)	6.5	kJ/m²	ISO 179
FNCT (3.5 MPa, 2 % Igepal BC/9, 80°C)	8	Hrs	ISO 16770
ESCR	150	h	ASTM D1693
Hardness Shore D	64	-	ISO 868

(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.