

SABIC® HDPE B5822

HIGH DENSITY POLYETHYLENE

DESCRIPTION

HDPE B5822 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.

TYPICAL APPLICATIONS

B5822 is specially designed for small blow molded bottles applications (<10 L) for packaging of consumer goods (cosmetics, dairy care), detergents and for toys. The grade can be used for food contact applications.

TYPICAL PROPERTY VALUES

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
POLYMER PROPERTIES⁽¹⁾			
Melt Flow Rate (MFR)			
at 190°C and 2.16 kg	0.3	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/10 min	ISO 1133
Density at 23°C	958	kg/m ³	ASTM D1505
MECHANICAL PROPERTIES⁽²⁾			
Tensile modulus	1350	MPa	ASTM D638
Tensile Stress at Yield	28	MPa	ISO 527-1/-2
Tensile Strain at Yield	7.5	%	ISO 527-1/-2
Tensile Impact Strength at -30°C (Notched)	75	kJ/m ²	ISO 8256
Charpy Notched Impact Strength (-30°C, Type 1, Notch A)	6.5	kJ/m ²	ISO 179
Hardness (Shore D)	64	-	ASTM D2240
FNCT (3.5 MPa, 2 % Igepal BC/9, 80°C) ⁽²⁾	8	Hrs	ISO 16770
ESCR	150	h	ASTM D1693