

# 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

Revision 20230331

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

(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.



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