April 2015

Product Data Sheet
Polyethylene
BB2588

High Density Polyethylene for Blow Moulding

DESCRIPTION

BB2588 is a multimodal, high-density polyethylene intended for blow moulding with high stiffness and superior environmental stress crack resistance (ESCR). This grade exhibits excellent organoleptic properties.

APPLICATIONS

- **BB2588** is recommended for use in up to 10 liters size detergents, cleaners, motor oils, cosmetics, personal care, household and industrial chemicals bottles.
- Food packaging (Juices, Milk)

SPECIAL FEATURES

- Superior environmental stress crack resistance
- High stiffness
- Easy flow.

PHYSICAL PROPERTIES

Typical properties*	Conditions	Method	Value	Unit
Physical				
Density		ISO 1183	958	kg/m³
Melt Flow Rate (MFR_2)	(190ºC / 2.16kg)	ISO 1133	0.23	g/10min
Melt Flow Rate (MFR_5)	(190ºC / 5.0kg)	ISO 1133	1.0	g/10min
Melt Flow Rate (MFR_{21})	(190ºC / 21.6kg)	ISO 1133	25.0	g/10min
Mechanical				
Tensile Modulus	(1mm/min)	ISO 527-2	1400	MPa
Tensile Stress at Yield	(50mm/min)	ISO 527-2	30.0	MPa
Tensile Strain at Yield	(50mm/min)	ISO 527-2	9.0	%
Flexural Modulus	(2mm/min)	ISO 178	1500	MPa
Charpy notched impact	(23ºC)	ISO 179	12	KJ/m²
Shore Hardness	(Shore D- 3 Sec.)	ASTM D2240	66	
IZOD notched impact	(23ºC)	ASTM D256	160	J/m
Thermal				
VICAT Softening Temperature		ISO 306	127	ºC
Crystallization Temperature		ISO 11357-3	120.5	ºC
Melting Temperature		ISO 11357-3	132.0	ºC
Additional Properties				
ESCR	(10% Igepal, F50)	ASTM D1693-B	>500	Hours

**** Data should not be used for specification work.***

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PROCESSING TECHNIQUES

BB2588 is easy to extrude and can be used in all conventional blow moulding machines. A melt temperature of 170-190°C is recommended.

Temperature

Barrel:	170-190°C
Die:	175-190°C

STORAGE

BB2588 should be stored in dry conditions at temperatures below 50°C and protected from UV-light. Improper storage can initiate degradation, which results in odor generation and color changes and can have negative effects on the physical properties of this product.

More information on storage can be found in Safety Information Sheet (SIS) for this product.

SAFETY

The product is not classified as a dangerous preparation.

Please see our Product Safety information sheet (SIS) for details on various aspects of safety; recovery and disposal of the product, for more information contact your Borouge representative.

RECYCLING

The product is suitable for recycling using modern methods of shredding and cleaning. In-house production waste should be kept clean to facilitate direct recycling.

RELATED DOCUMENTS

The following related documents are available on request, and represent various aspects on the usability, safety, recovery and disposal of the product.

Product safety information sheet (SIS)
Statement on chemicals, regulations and standards
Statement on compliance to food contact regulations

DISCLAIMER

The product(s) mentioned herein are not intended to be used for medical, pharmaceutical or healthcare applications and we do not support their use for such applications.

To the best of our knowledge, the information contained herein is accurate and reliable as of the date of publication, however we do not assume any liability whatsoever for the accuracy and completeness of such information.

Borouge makes no warranties which extend beyond the description contained herein. Nothing herein shall constitute any warranty of merchantability or fitness for a particular purpose.

It is the customer's responsibility to inspect and test our products in order to satisfy itself as to the suitability of the products for the customer's particular purpose. The customer is responsible for the appropriate, safe and legal use, processing and handling of our products.

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