

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.

CAS-No. 25087-34-7

APPLICATIONS

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

KEY FEATURES

Superior environmental stress crack resistance, High stiffness and Easy flow.

PHYSICAL PROPERTIES

Property	Typical Value*	Test Method
Density	958 kg/m ³	ISO 1183
Melt Flow Rate (190°C/2.16kg)	0.23 g/10min	ISO 1133
Melt Flow Rate (190°C/5.0kg)	1.0 g/10min	ISO 1133
Melt Flow Rate (190°C/21.6kg)	25.0 g/10min	ISO 1133
Tensile Modulus (1mm/min)	1400 MPa	ISO 527-2
Tensile Stress at Yield (50mm/min)	30.0 MPa	ISO 527-2
Tensile Strain at Yield (50mm/min)	8.0 %	ISO 527-2
Flexural Modulus (2mm/min)	1500 MPa	ISO 178
Charpy Notched Impact (23°C)	12 KJ/m ²	ISO 179
IZOD notched impact (23°C)	165 J/m	ASTM D256
Shore Hardness (Shore D- 3 sec.)	66	ASTM D2240
Melting Temperature	132.0 °C	ISO 11357/03
Crystallization Temperature	120.5 °C	ISO 11357/03
VICAT Softening Point A50 (10 N)	127.0 °C	ISO 306
ESCR – 10% Igepal – F 50%	>500 Hours	ASTM D1693-B

* Typical properties and data should not be used for specification work

PROCESSING CONDITIONS

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

The following conditions should be used as a guide when starting up the extruder.

Barrel zone	170-190°C
Die zone	175-190°C

Please contact your local Borouge representative for specific recommendations for processing conditions

FOOD CONTACT REGULATIONS

BB2588 fulfils the food contact regulations in most countries. If required, contact your Borouge / Borealis representative for a certificate.

STORAGE

BB2588 should be stored in dry conditions at temperature bellow 50°C and protected from UV-light. Improper storage can initiate degradation, which results in odour generation and colour changes and can have negative effects on 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 hazardous mixture.

Dust and fines from the product carry a risk of dust explosion. All equipment should be properly earthed. Inhalation of dust should be avoided as it may cause irritation of the respiratory system. Small amounts of fumes are generated during processing of the product. Proper ventilation is therefore required.

Please see our 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.

Safety Information Sheet
Statement on chemicals, regulations and standards
Statement on compliance to regulations for drinking water pipes

STANDARDS

Borouge is certified to various ISO standards, please refer to Borouge.com for more information.

DISCLAIMER

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.

No liability can be accepted in respect of the use of Borouge's products in conjunction with other materials. The information contained herein relates exclusively to our products when not used in conjunction with any third party materials.

Borstar® is a trademark of the Borealis group.

June 2019