Polyethylene
BorSafe™ HE3490-IM

Black high density Polyethylene compound for injection-moulded pressure fittings

Description

BorSafe HE3490-IM is a bimodal polyethylene compound produced by the advanced Borstar technology.

Well dispersed carbon black gives outstanding UV resistance. Long term stability is ensured by an optimised stabilisation system.

BorSafe HE3490-IM is classified as an MRS 10.0 material (PE100).

Applications

BorSafe HE3490-IM is especially designed for the injection moulding of fittings in the application field of

Drinking water
Natural gas
Pressure sewerage
Industrial
Relining
Sea outfall

Special features

BorSafe HE3490-IM is a high density hexene copolymer compound with an optimal balance between mouldability and strength.

Fittings are easily welded to HDPE and MDPE using conventional methods such as butt-welding, electrofusion or socket-welding.

Physical Properties

Property	Typical Value Data should not be used for specification work	Test Method
Density (Compound)	959 kg/m3	ISO 1872-2/ISO 1183
Melt Flow Rate (190 °C/5,0 kg)	0,55 g/10min	ISO 1133
Tensile Modulus	1.100 MPa	ISO 527-2
Tensile Strain at Break	> 600 %	ISO 527-2
Tensile Stress at Yield	24 MPa	ISO 527-2
Carbon black content	2 %	ASTM D 1603
Carbon black dispersion	<3	ISO 18553
Oxidation Induction Time (200 °C),	> 20 min	EN 728
Resistance to slow crack growth (9,2 bar, 80 °C)	1.000 h	ISO 13479

Processing Techniques

Following parameters should be used as guidelines:

Extrusion

Melt temperature	190 - 260 °C

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Specific recommendations for processing conditions can be determined only when the application and type of equipment are known. Please contact your local Borealis representative for such particulars.

Storage

BorSafe HE3490-IM should be stored in dry conditions at temperatures below 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 the physical properties of this product.

Safety

The product is not classified as a dangerous preparation.

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.

Please see our Safety Data Sheet for details on various aspects of safety, recovery and disposal of the product, for more information contact your Borealis representative.

Related Documents

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

Statement on compliance to food contact regulations
Statement on compliance to regulations for drinking water pipes

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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.

Borealis 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 Borealis' 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.

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