



Polyethylene BorSafe™ ME3440-D

Black medium density Polyethylene compound for pressure pipes

Description

BorSafe ME3440-D is a bimodal polyethylene compound produced by the advanced Borstar technology.

BorSafe ME3440-D is classified as an MRS 8.0 material (PE80).

Applications

BorSafe ME3440-D is recommended for pressure pipe systems in the applications field of:

Drinking water
Industrial

Relining

Particularly where flexibility and coilability is of importance. It also shows excellent resistance to rapid crack propagation and slow crack growth. Thanks to the structure, it gives outstanding extrudability, compared to conventional PE80. It also exhibits an improved resistance to chlorinated water disinfectants.

Physical Properties

Property	Typical Value	Test Method
Data should not be used for specification work		
Density ¹	954 kg/m ³	ISO 1183A
Melt Flow Rate (190 °C/5,0 kg)	0,85 g/10min	ISO 1133
Tensile Modulus (1 mm/min)	800 MPa	ISO 527-2
Tensile Strain at Break	> 600 %	ISO 527-2
Tensile Stress at Yield (50 mm/min)	19 MPa	ISO 527-2
Carbon black content	2 - 2,5 %	ISO 6964
Carbon black dispersion	<= 3	ISO 18553
Oxidation Induction Time (210 °C),	> 20 min	ISO 11357-6
Resistance to rapid crack propagation (S4 test, Pc at 0 °C, Test pipe 250 mm, SDR11)	2,5 bar	ISO 13477
Resistance to slow crack growth (8,0 bar, 80 °C)	> 2.000 hrs	ISO 13479

¹ Compound

Processing Techniques

The actual conditions will depend on the type of equipment used.

Extrusion

Cylinder	180 - 210 °C
Head	200 - 210 °C
Die	200 - 210 °C
Melt temperature	200 - 220 °C

For normal conditions and applications we suggest preheating and drying. 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.

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Polyethylene

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Storage

BorSafe ME3440-D 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 dangerous.

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" / "Product safety information 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 product.

Recovery and disposal of polyolefins
Information on emissions from processing and fires
"Safety data sheet" / "Product safety information sheet"
Statement on compliance to regulations for drinking water pipes
Statement on compliance to food contact regulations



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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.

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