### Polyethylene BorSafe<sup>™</sup> ME3440

Black medium density Polyethylene compound for pressure pipes

#### Description

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

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

#### Applications

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

Drinking water	Industrial
Natural gas	Relining
Pressure sewerage	Sea outfall

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.

#### **Physical Properties**

Property	Typical Value Data should not be used for s	Test Method specification work	
Density (Compound)	951 kg/m³	ISO 1183	
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	> 500 %	ISO 527-2	
Tensile Stress at Yield (50 mm/min)	19 MPa	ISO 527-2	
Oxidation Induction Time (200 °C),	> 20 min	EN 728	
Resistance to rapid crack propagation (S4 test, Pc at 0 °C,	> 6 bar	ISO 13477	
Test pipe 250 mm, SDR11)			
Resistance to slow crack growth (8,0 bar, 80 °C)	2.000 h	ISO 13479	

#### **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 explications we	

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.

BorSafe is a trademark of the Borealis group.

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## BorSafe ME3440

#### Storage

**BorSafe ME3440** 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 products.

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

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