

Yellow medium density Polyethylene compound for pressure pipes

Description

BorSafe ME3441 is a bimodal polyethylene compound produced by the advanced Borstar technology.

It includes a combination of pigments and stabilisers to ensure excellent long-term thermal stability and UV-resistance.

BorSafe ME3441 is classified as an MRS 8.0 material (PE80).

Applications

BorSafe ME3441 is recommended for pressure pipe systems in the applications field of:

Natural gas

particulary 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	Test Method specification work	
Density	944 kg/m3	ISO 1183	
Melt Flow Rate (190 °C/5,0 kg)	0,80 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 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 applications	we suggest preheating and drying. S

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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Storage

BorSafe ME3441 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.

Recovery and disposal of polyolefins Information on emissions from processing and fires Safety Data Sheet

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