



Polyethylene BorSafe™ HE3490-LS-H

Black High Density Polyethylene compound for pressure pipes

Description

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

Applications

BorSafe HE3490-LS-H is recommended for

Drinking water
Natural gas
Pressure sewerage

Relining
Sea outfall
Industrial

It is especially designed for the production of larger diameter, thick wall pipe, but can be processed for the whole range of diameters.

Special features

BorSafe HE3490-LS-H is a high density hexene copolymer compound with an outstanding resistance to slow crack growth.

Physical Properties

Property	Typical Value	Test Method
	Data should not be used for specification work	
Density (Base Resin)	948 kg/m ³	ISO 1872-2/ISO 1183
Density (Compound)	959 kg/m ³	ISO 1872-2/ISO 1183
Melt Flow Rate (190 °C/5,0 kg)	0,25 g/10min	ISO 1133
Tensile Modulus (1 mm/min)	1.100 MPa	ISO 527-2
Tensile Strain at Break	> 600 %	ISO 527-2
Tensile Stress at Yield (50 mm/min)	25 MPa	ISO 527-2
Carbon black content	2 - 2,5 %	ISO 6964
Oxidation Induction Time (210 °C),	> 20 min	EN 728
Resistance to rapid crack propagation (S4 test, Pc at 0 °C, Test pipe 250 mm, SDR11)	> 10 bar	ISO 13477
Resistance to slow crack growth (9,2 bar, 80 °C)	> 5.000 h	ISO 13479

Processing Techniques

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

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Extrusion

Cylinder	190 - 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.

Storage

BorSafe HE3490-LS-H should be stored in dry conditions at temperatures below 60°C and protected from UV-light. Improper storage can initiate degradation.

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.



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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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