



Polyethylene Borlink™ LE0550DC

Description

Borlink LE0550DC is a Supersmooth crosslinkable black polyethylene compound, specially designed for semiconductive conductor screen and bonded insulation screen of energy cables.

Applications

Borlink LE0550DC is intended for semiconductive shielding of crosslinked HVDC solid dielectric cables.

Special features

Borlink LE0550DC is a ready-to-use Supersmooth semiconductive compound. The excellent distribution of carbon black additives in Borlink LE0550DC results in a superior smoothness of the semiconductive screen. It is specially developed to provide low space charge accumulation when used in HVDC constructions using Borlink LE4253DC as insulation.

Physical Properties

Property	Typical Value	Test Method
Data should not be used for specification work		
Density	1100 kg/m ³	ISO 1183
Tensile Strain at Break (25 mm/min) ¹	380 %	ISO 527
Tensile Strength (25 mm/min) ¹	22 MPa	ISO 527
Change of Tensile Properties After Ageing (168 h, 135 °C) ¹	< 20 %	IEC 60811-401
Hot Set Test (200 °C, 0,10 MPa)	Elongation under load 25 % Permanent deformation 0 %	IEC 60811-507
Moisture	100 ppm	Karl Fischer-titration

¹ Measured on crosslinked specimens

Electrical Properties

Property	Typical Value	Test Method
Data should not be used for specification work		
DC Volume Resistivity (23 °C)	< 100 Ωcm	ISO 3915
DC Volume Resistivity (90 °C)	< 1000 Ωcm	ISO 3915

Processing Techniques

Borlink LE0550DC provides excellent surface finish and outstanding output rates, when processing conditions are optimized for the actual processing equipment and cable dimensions. Optimal conditions may vary according to the equipment used. To produce a good and reliable cable, it is essential to ensure careful and very clean handling of the semiconductive material. Hence all material handling should preferably be conducted in closed systems and in clean room conditions. Please contact your Borealis representative for more details.

Borlink is a trademark of the Borealis group.

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 Polyethylene
Borlink LE0550DC**Pre-drying**

It is recommended that Borlink LE0550DC is dried prior to extrusion. Typical drying conditions are shown below:

Predrying (4h) 60°C With dehumidified air

Extrusion

Typical processing temperature ranges for Borlink LE0550DC are shown below:

Melt temperature 120 - 130 °C

Packaging

Package: Smallbins

Storage

Borlink LE0550DC has a shelf life of 18 months from production date if stored in unopened original packages, under dry and clean conditions at temperatures between 10 - 30 °C (50 - 85 °F).

More information on storage is found in our "Safety data sheet" / "Product safety information sheet" for this product.

Safety

Please see our "Safety data sheet" / "Product safety information sheet" for details on various aspects of safety of the product. For more information, contact your Borealis representative.

 Polyethylene
Borlink LE0550DC**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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