

# Polyethylene Borlink™ LE0592S

## Description

**Borlink LE0592S** is a crosslinkable black polyethylene compound, specially designed for semiconductive conductor screen and bonded insulation screen of energy cables.

## Applications

**Borlink LE0592S** is intended for semiconductive applications in XLPE high voltage (HV) cables rated up to 220kV. It can be used as inner and outer semicon for bonded constructions and as inner semicon for strippable constructions.

## Specifications

**Borlink LE0592S** meets the applicable requirements as below when processed using sound extrusion practices and testing procedures

AEIC CS9  
IEC 60840  
Cenelec HD 632 S1

IEC 62067  
ANSI/ICEA 108-720

## Special Features

**Borlink LE0592S** is a ready-to-use semiconductive compound. It offers excellent thermal stability which provides robust cable extrusion and crosslinking at high surface temperature, allowing for high line speed.

The excellent distribution of carbon black and additives in Borlink LE0592S would result in a very smooth semiconductive screen.

## Physical Properties

Property	Typical Value	Test Method
Data should not be used for specification work		
Density	1135 kg/m <sup>3</sup>	ISO 1183
Tensile Strain at Break (25 mm/min) <sup>1</sup>	200 %	ISO 527
Tensile Strength (25 mm/min) <sup>1</sup>	22 MPa	ISO 527
Change of Tensile Properties After Ageing (168 h, 135 °C) <sup>1</sup>	< 20 %	IEC 60811-401
Hot Set Test (200 °C, 0,20 MPa)	Elongation under load 25 % Permanent deformation 0 %	IEC 60811-507
MDR, max torque	12,0 dNm	ISO 6502
Moisture	200 ppm	Karl Fischer-titration

<sup>1</sup> Measured on crosslinked specimens





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## Electrical Properties

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

## Processing Techniques

Borlink LE0592S 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. Hence all material handling should preferably be conducted in closed systems and in clean room conditions. Please contact your Borealis representative for more details.

### Extrusion

Hopper drying (4 h)	60 °C	With dehumidified air
Melt temperature	120 - 135 °C	

## Packaging

Package: Smallbins

## Storage

**Borlink LE0592S** 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, recovery and disposal of the product. For more information, contact your Borealis representative. The product is not classified as dangerous.





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## Disclaimer

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