30.03.2015 Ed.2

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 Data should not be used for specification work	Test Method
Density		1135 kg/m³	ISO 1183
Tensile Strain at Break (25 mm/min) [1]		200 %	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, 0,20 MPa)	Elongation under load	25 %	IEC 60811-507
	Permanent deformation	0 %	
MDR, max torque		12,0 dNm	ISO 6502
Moisture		200 ppm	Karl Fischer-titration

[1] Measured on crosslinked specimens

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30.03.2015 Ed.2

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Electrical Properties

Property	Typical Value Data should not be used for specification work	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

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.

To the best of our knowledge, the information contained herein is accurate and reliable as of the date of publication; however we do not assume any liability whatsoever for the accuracy and completeness of such information.

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