



Polyethylene

VisicoTM

LE0540

Silane Crosslinkable Semiconductive Compound

Description

Visico LE0540 is a silane crosslinkable black polyethylene compound, specially designed for bonded semiconductive screen applications.

Visico LE0540 is highly suitable for co-extrusion with LDPE silane crosslinkable insulation materials.

Applications

Visico LE0540 is intended for semiconductive applications for silane crosslinkable medium voltage cables with rated voltages up to 36 kV.

Specifications

AEIC CS8

Cenelec HD 620 S1

IEC 60502

ISO 1872-E/BA, KHX, 23-G200, C30

NF C33-223

BS 6622

Special features

Visico LE0540 a ready-to-use compound, which requires no further addition of a catalyst masterbatch. Visico LE0540 crosslinks via the migration of catalyst from its co-extrusion with silane insulation layer. The excellent distribution of carbon black and additives in Visico LE0540 would result in an outstanding smooth semiconductive screen. Visico LE0540 offers easy and long extrusion performance.

Physical Properties

Property	Typical Value	Test Method
Data should not be used for specification work		
Density	1080 kg/m ³	ISO 1872-2/ISO 1183
Melt Flow Rate (190 °C/21,6 kg)	25 g/10min	ISO 1133
Tensile Strain at Break (25 mm/min)	400 %	ISO 527
Tensile Strength (25 mm/min)	13 MPa	ISO 527
Change of Tensile Properties After Ageing (240 h, 135 °C)	< 20 %	IEC 60811-1-2
Hardness, Shore D (1 s)	50	ISO 868
Hot Set Test (200 °C, 0,20 MPa)	Elongation under load	IEC 60811-2-1
Moisture	200 ppm	Karl Fischer-titration
Pressure Test at High Temperature (90 °C, 6 h)	< 5 %	IEC 60811-3-1





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Electrical Properties

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

Processing Techniques

Visico LE0540 provides excellent surface finish and minimal risk for scorch when processing conditions are optimal. The actual conditions will depend on the type of equipment used.

Extrusion

Typical processing temperature ranges for Visico LE0540 are shown below:

Barrel 2	150 °C	
Barrel 3	150 °C	
Barrel 4	150 °C	
Head	150 °C	
Melt temperature	170 °C	Maximum

Crosslinking

Can be crosslinked by immersion in hot water or exposed to low pressure steam at a temperature in typical circumstances of 70 °C. The time period needed for crosslinking will depend on e.g.the thickness of insulation, type of semiconductive screen and reel size.

Packaging

Package: Smallbins

Storage

Visico LE0540 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.





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Safety

The product is not classified as dangerous and is intended for industrial use only. Check and follow local codes and regulations!

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.

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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