



Polyethylene LE0563

Thermoplastic Semiconductive Jacketing Compound

Description

LE0563 is a thermoplastic semiconductive compound specifically designed for medium- high and extra-high voltage cable systems requiring improved grounding. It may be used either as a complete jacket or as a thin layer extruded on top of the regular jacket. This compounds permits easy diagnostic testing of the cable to ensure jacket conformity, allowing confirmation of fault-free cable before and after installation. It provides excellent mechanical properties, superior environmental stress crack resistance and good electrical conductivity. Due to the semiconductive properties, it will also provide added protection against lightning.

Specifications

LE0563 meets the applicable requirements as below when processed using sound extrusion practice and testing procedure:

IEC 60502, Type ST7
IEC 60840, Type ST7
IEC 62067, Type ST7

ICEA S-94-649, Type 1
ICEA S-108-720, Type 1
ICEA S-108-720, Type 2

Special features

LE0563 provides excellent environmental stress crack resistance and good electrical conductivity.

Physical Properties

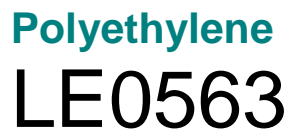
Property	Typical Value	Test Method
Data should not be used for specification work		
Density (Compound)	1055 kg/m ³	ISO 1183
Melt Flow Rate (190 °C/21,6 kg)	30 g/10min	ISO 1133
Melt Flow Rate (190 °C/2,16 kg)	0,2 g/10min	ISO 1133
Tensile Strain at Break (25 mm/min) ¹	560 %	ISO 527
Tensile Strength (25 mm/min) ¹	16 MPa	ISO 527
Change of Tensile Properties After Ageing (240 h, 110 °C)	< 25 %	IEC 60811-401
Environmental Stress Crack Resistance (50 °C) (Igepal 10 %), (F0) ¹	> 2.000 h	ASTM D 1693
Hardness, Shore D (1 s) ¹	58	ISO 868
Hardness, Shore D (3 s) ¹	55	ISO 868
Moisture	400 ppm	Karl Fischer-titration
Pressure Test at High Temperature (110 °C, 6 h) ¹	< 5 %	IEC 60811-508

¹ Measured on moulded plaques.

Electrical Properties

Property	Typical Value	Test Method
Data should not be used for specification work		
DC Volume Resistivity (23 °C) ¹	25 Ohm.cm	ASTM D 991
DC Volume Resistivity (90 °C) ¹	50 Ohm.cm	ASTM D 991

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Processing Techniques

Predrying

Predrying (4 h)

70°C

With dehumidified air

Extrusion

Barrel 1

180 °C

356 °F

Barrel 2

190 °C

374 °F

Barrel 3

200 °C

392 °F

Barrel 4

210 °C

410 °F

Barrel 5

210 °C

410 °F

Die

210 °C

410 °F

Melt temperature

215 - 245 °C

419 - 473 °F

Packaging

Package: Smallbins

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.

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