

LE0563

Thermoplastic Semiconductive Compound for Grounding and Diagnostics Purposes



Picture source: TenneT TSO GmbH

LE0563 – Ensuring long-lasting performance under severe conditions

LE0563 is Borealis' thermoplastic semiconductive compound for medium-, high- and extra-high-voltage cable systems that require improved grounding. The compound facilitates straightforward diagnostic testing to verify cable jacket conformity, ensuring cable performance is without fault both before and after installation. LE0563 also offers exceptional versatility, being suitable for use as either as a complete jacket or as a thin, extruded layer on top of a standard jacket.

LE0563 is designed to deliver

- Excellent mechanical properties compliant with ST7 and ICEA S-180-720, Types 1 & 2
- Superior environmental stress crack resistance
- Good electrical conductivity
- Semiconductive properties, which provide added protection against lightning strikes.



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LE0563 – Property profile meeting the most stringent requirements

Property	Typical values	Test Method
Density (compound)	1055	ISO 1183
Melt Flow Rate (190 °C/21.6 kg)	30 g/10 min	ISO 1133
Melt Flow Rate (190 °C/2.16 kg)	0.2 g/10 min	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 Aging (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
Pressure Test at High Temperature (110 °C, 6 h) ¹	< 5%	IEC60811-508
Volume Resistivity (25 °C) ¹	25 Ω cm	ASTM D 991
Volume Resistivity (50 °C) ¹	50 Ω cm	ASTM D 991

¹ Measured on molded plaques

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