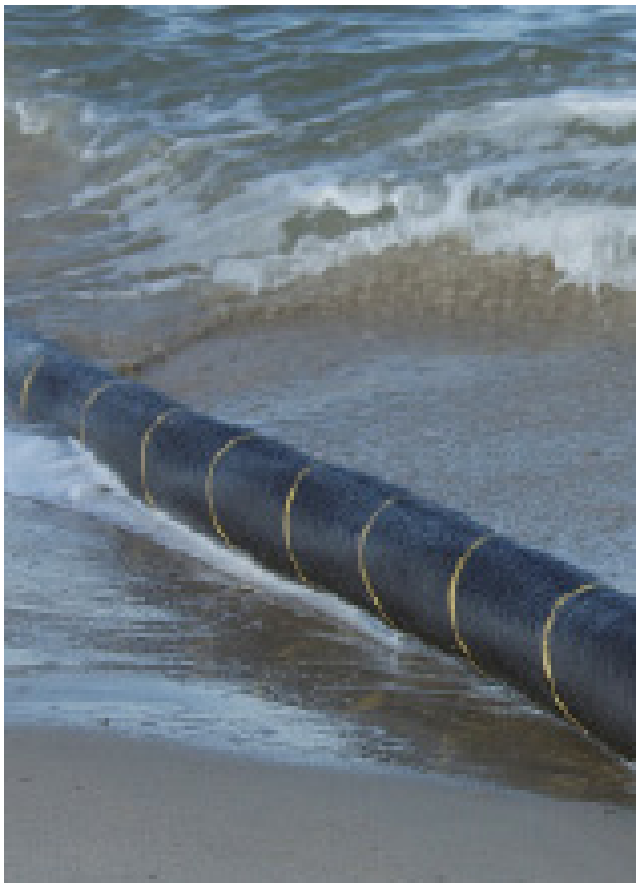


LE0563

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 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.

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

Borealis solutions bring energy all around

Borealis has been a trusted partner to the energy industry for over 60 years, delivering innovative polyolefin solutions that help power our lives. Our portfolio includes high-performance compounds for wire and cables applications ranging from underwater power projects to transmission and distribution networks, communications, and advanced energy storage systems and capacitors.

With operations and joint ventures in the US (Baystar™ and Rockport), South Korea (DYM Solutions) and the UAE (Borouge), our reach extends well beyond Europe. This global presence widens our expertise and extends the impact of our work.

Our purpose is to reinvent essentials for sustainable living. As part of this commitment, we're helping to accelerate electrification and the green energy transition through our proprietary technologies and advanced material solutions. These include technology platform Borlink™, sustainable engineering polymer class Stelora™, solar brand Quentys™, and Borclean™ capacitor film resins.

Meanwhile, our Borcycle™ M, Borcycle™ C and Borneables™ portfolios are meeting demand for sustainable solutions that don't compromise on quality. Independently certified by ISCC PLUS, these high-performance compounds are the tangible result of our EverMinds™ initiative to drive progress in the transition to a circular economy.

Borclean™, Borcycle™, Borlink™, Borneables™, EverMinds™, Quentys™ and Stelora™ are trademarks of Borealis AG.

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