

REXL LB10 / CB10

XLPE for Low Voltage Cables

27.08.2024 RLC Rev.00

TECHNICAL DATASHEET

REXL LB10 is a silane crosslinkable black compound system specially designed for insulation of low voltage energy cables. REXL LB10 is used together with REXL CB10 Catalyst in the ratio of 95:5. The crosslinking step is carried out at ambient conditions and in hot water or exposure to steam. The system contains fine size carbon black to ensure excellent weatherability.

General Properties

Color	Black
Additives	Carbon Black
Typical Characteristics	Good Processability Weather Resistance Fast Curing Speed Excellent Surface Finish Storage Stability
Applications	Insulation of low voltage energy cables, range up to 10 kV Jacketing

Physical & Thermal Properties

Property	Unit	Standard	Typical Values
Density	g/cm ³	ISO 1183	0,93
MFI (190°C, 2,16 Kg)	g/10min	ISO 1133	1,0
Tensile Strength	Mpa	IEC 60811-501	> 15
Tensile Strain at Break	%		> 400
Hot Set Test	Elongation Under Load % (200°C, 0,3 Mpa)	IEC 60811-507	55
	Permanent Deformation % (200°C, 0,3 Mpa)		<5
gel content	%	NF C33-209:1996	> 65

Electrical Properties

Dielectric Constant (50Hz)	IEC 62631-2-1	2,6
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Crosslinking

REXL products can be crosslinked at room temperature or by immersion in hot water and exposed to low pressure steam at max. 90 °C

<u>Insulation Thickness (mm)</u>	<u>Time</u>	<u>Condition</u>
0,7 mm	< 2 day	Room Temperature
1,8 mm	< 2 h	90 °C Water Bath

Extrusion

	<u>Temperature (°C)</u>
Zone 1	150
Zone 2	170
Zone 3	180
Zone 4	190
Die head	200

The temperature of the zones can vary depending on the extruder, equipment, and cable/wire thickness. The melted polymer temperature during extrusion should ideally remain below 220 °C. This helps ensure a stable process and a smooth cable surface.

Packaging

XLPE	25 Kg	Moisture resistance packs
Catalyst	1,25 Kg	Moisture resistance packs

Storage

REXL LB10 and Catalyst CB10 should be stored in dry conditions and protected from direct sunlight. REXL LB10 can be stored for 12-18 months and REXL CB10 for 15-18 months after production date, at 10-30 °C in original packages.

Note: The properties shown are typical values for the product mentioned above. We can not guarantee for the final products due to additional processing at your plant which is not under our control.