

MX51220

Peroxide MV XLPE Natural Insulation Compound



Technical Data Sheet

General Information

- Description:** MX51220 is a cross linkable polyethylene compound designed for medium voltage power cables up to 35kV. It is incorporated with active peroxide with excellent properties. It contains special additives which ensure long term thermal stability, long storage life and long production run during cable manufacturing and prevents pre cross-linking during extrusion.
- Features:** Provision for bottom discharge
High throughput
- Uses:** Sheathing compound for medium voltage cables.
- Classifications:** BS 6622, BS 7655-1.3: GP8, IEC 60502-2: XLPE, IEC 60092-354 & 351: XLPE
- Form:** \varnothing 3 mm x 2 – 3 mm pellets
- Color:** Natural

Technical Information

Physical Properties

	Nominal Value	Test Method
Density 2 (g/cm ³) @25°C	0.92 ± 0.02	ASTM D 792
Durometer Hardness ³ , Shore A	91 ± 2	ASTM D 2240

Mechanical Properties

Tensile Strength ³ (N/mm ²)	> 19.0	IEC 60811-501
Elongation at Break ³ (%)	> 450	IEC 60811-501

Electrical Properties

Volume resistivity @ 23°C (Ω.cm)	>10 ¹⁶	IEC 60093
Dielectric Constant, 1Mhz	2.3	ASTM-D-150
Dissipation Factor, 1Mhz	<5 x 10 ⁻⁴	ASTM-D-150
Dielectric Strength (kV.mm)	>27	ASTM-D-149

Aging @ 135°C for 168 hrs³

Change in Tensile Strength (% of unaged)	<25	IEC 60811-401
Change in Ultimate Elongation (% of unaged)	<25	IEC 60811-401

Hot Set test @ 200°C for 15 min³

Elongation under 20N/cm ² (%)	90 ± 30	IEC 60811-507
Permanent elongation after cooling	<5.0	IEC 60811-507

Water absorption @ 85°C for 336 hrs³

Variation in mass (mg/cm ²)	<1	IEC 60811-402
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¹ Typical laboratory results obtained for pressed sheets. Actual values are influenced by extruder type, head, tools, screw geometry and processing conditions. These values are not to be construed as specifications.

² 500 mm/min.

³ Tests performed on cross-linked samples