

KALPANA INDUSTRIES LTD.

TECHNICAL DATA SHEET



PRODUCT DESIGNATION: KI-XL-8503 CROSSLINKABLE POLYETHYLENE COMPOUND

Description: - KI-XL-8503 is a low density, crosslinkable (Peroxide base) polyethylene compound developed specially for medium and high voltage power cables. It contains extremely low level of contamination and proper balance of anti oxidant and peroxide to ensure thermal stability during and after extrusion and optimum cure levels.

Basic Properties of Resin:

Properties	Unit	Typical value	Test Method
Density	gm / cm ³	0.922	ASTM D-792
Melt flow index @190 °C / 2.16 kg load	gm / 10 min.	2.0	ASTM D-1238

Typical Properties:-

Properties	Unit	Typical value	Test Method
TENSILE STRENGTH	MPa	18.5	ASTM D 638 IEC-811-1-2 cl-8
VARIATION IN TENSILE STRENGTH *	%	< 20	IEC-811-1-2 cl-9
ELONGATION AT BREAK	%	315	ASTM D 638 IEC-811-1-2 cl-8
VARIATION IN ELONGATION AT BREAK *	%	< 20	IEC-811-1-2 cl-9
HOT ELONGATION @200 °C / 20 N/cm ²	%	65	IEC-811-2-1 cl-9
PERMANENT SET	%	0	IEC-811-2-1 cl-9

- After Heat Ageing at 135 °C for 168 hrs.
- On moulded sheet at 180 °C / 20 min.

ELECTRICAL PROPERTIES:

Properties	Unit	Typical value	Test Method
DI-ELECTRIC CONSTANT	-	2.3	ASTM D 150
DISSIPATION FACTOR	-	0.0004	ASTM D 150
DI-ELECTRIC STRENGTH	Kv/mm	>30	ASTM D 149
DC VOLUME RESISTIVITY	Ω.cm	1 X 10 ¹⁶	ASTM D 257

Recommended Processing Conditions:-

Position	Temperature, (°C)
Barrel	95 – 115
Head	120
Compound at die	120 – 130

Delivery Form : Pellets

Package : 25 Kg bags & 500 Kgs in Corrugated paper boxes.

LIABILITY:

Information provided in this bulletin is given in good faith. It is recommended to be used only as a general guideline. The end-user is well advised to verify at his end the fitness of this product to his specific needs, available technology and test method. KIL accepts no liability in manufacturing defects of end product, nor can give any guarantee of results.