



PE-JKT-BK

Black Polyethylene Cable-Jacketing Compound

PRELIMINARY ENGINEERING DATA

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OWNER TECHNICAL & R&D
STATUS CONTROLLED DEVELOPMENT DATA

PRODUCT OVERVIEW

A black, UV/thermal-stabilised HDPE/LLDPE jacketing compound platform for power, telecom, conduit and industrial cable development. Applications: Power-cable sheath; Telecom cable jacket; Conduit and industrial jacketing. Key features: High ESCR target; UV and thermal stabilisation; Electrical-insulation performance target.

PRELIMINARY TECHNICAL PROPERTIES

PROPERTY / CONDITION	TEST METHOD	PROVISIONAL VALUE	UNIT
Melt flow rate, 190°C/2.16 kg	ISO 1133-1	0.25-0.40	g/10 min
Density	ISO 1183-1	0.953-0.960	g/cm³
Carbon-black content	IEC 60811-605	2.0-3.0	wt. %
Carbon-black dispersion	IEC 60811-607	To applicable cable/customer limit	
Tensile stress at break	IEC 60811-501 / ISO 527-2 as agreed	> 30	MPa
Elongation at break	IEC 60811-501 / ISO 527-2 as agreed	≥ 600	%
Properties after ageing, 110°C/336 h	IEC 60811-401 / agreed cable standard	To be established	
ESCR	ASTM D1693	> 2,000	h
OIT at 210°C	ISO 11357-6	> 30	min
Volume resistivity	IEC 62631-3-1	> 1×10 ¹⁶	Ω·cm
Moisture content	ISO 15512	< 0.03	wt. %

QUALIFICATION & USE

- Values are development targets, not a sales specification or certificate of analysis.
- Final limits require independent production-lot validation using the cited methods and controlled specimen preparation.
- Regulatory, food-contact, medical, UL, IEC, ATEX or OEM compliance applies only when confirmed in a grade-specific document.