



UV IRRADIATION CROSS-LINKED POLYETHYLENE CABLE MATERIAL

DESCRIPTION

The product is made from polyethylene as the main raw material, with the addition of photoinitiators, antioxidants, and other additives, through mixing, plasticizing, and granulation. This product conforms to the JB/T10437-2004 standard and features excellent mechanical properties, a smooth and flat surface, no pre-crosslinking, and a simple extrusion process. Simultaneously, the company has also developed matching special color masterbatches (red, yellow, blue, green, etc.), which possess superior weather resistance, high temperature resistance, and do not fade during production.

DESCRIPTION

Name	Type	Scope of application
90°C UV-resistant cross-linked polyethylene insulated cable material	90	Production of 3kV and below cross-linked power cables (insulation only)
125°C UV-resistant cross-linked polyethylene insulated cable material	125	
135°C UV-resistant cross-linked polyethylene insulated cable material	135	

STORAGE AND TRANSPORTATION

The product weighs 750±0.2kg/bag. The inner packaging is a polyethylene bag, and the outer packaging is a polyethylene/kraft paper composite bag. It should be stored in a well-ventilated, dry, and light-proof warehouse and protected from sunlight and rain during transportation.

PERFORMANCE

Inspection items	unit	90	125	135
Original tensile strength	MPa	17.8	17.5	23
Original elongation at break	%	500	505	425
Aging temperature	°C	135	158	168
Aging time	h	168	168	168
Change rate of tensile strength after aging	%	14	13	8
Change in elongation at break after aging	%	-8	-5	-6
Thermal extension (0.2 MPa, 15 min)	°C	200	200	200
Elongation under load	%	55	45	60
gel content	%	65	69	70
Volume resistivity at 20°C	·m	1.4×10 ¹⁶	1.8×10 ¹⁵	2.3×10 ¹⁵
Dielectric strength	MV/m	38	39	40