ZC-4212 Outer Bonded Semiconductive Shield Compound for MV Power Cable up to 35kV

This material is used for bonded insulation screen crosslinkable semiconductive shielding material. It is produced by using high quality EVA resin, conductive black carbon as the main material, adding cross-linking agent, antioxidant and other additives; mixed granulation and fabrication process is stable and reliable in quality.

Application: Shielding material of 35kV crosslinkable polyethylene insulated cable insulation layer (fully bonded to insulation); Maximum working temperature is 90℃.

Property

Item		Unit	Test method	Typical value
Density@23℃		g/cm³	ASTM D792	1.15
Tensile strength		MPa	IEC60811-1-1	16.0
Elongation at break		%		300
Impact embrittlement performance@-40℃	Failure number	Piece	ASTM D746	0/30
After aging @135℃, 168h	Tensile strength variation	%	IEC 60811-1-2	+7
	Breaking elongation variation	%		-3
Hot prolongation@200℃, 0.2MPa, 15min	Elongation under the load	%	IEC 60811-2-1	60
	Permanent deformation	%		0
Volume resistivity@20℃		Ω·cm	ASTM D257	45
Volume resistivity@90℃		Ω·cm	ASTM D257	235
Peel strength		N/cm	ASTM D3330-02	-

Processing

Recommend to use specific extruder for shielding materials (draw ratio L/D = 20~25), other length to diameter ratio should be adjusted according to the circumstance. Recommend to use 60 to 80 type wire mesh filter.

Zone	1	2	3	4	5	Neck	Head	Die
Temperature Range ℃	65	85	95	105	105	105	105	105

- Above temperature is only for reference.

Storage

Keep at room temperature; Storage environment should be clean, dry and ventilated; Please dry it after a long-time opening.

Product packing

600kg in each package; Inner lined with plastic sealed film bag; Corrugated carton with tray at the bottom.