



## ZC-4101 Inner Semiconductive Shield Compound for MV Power Cable up to 10kV

This material is used for crosslinkable semiconductive wire and cable shielding material. It is made of 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 for 10kV crosslinkable polyethylene insulated cable conductor; Maximum working temperature is 90°C.

### Property

Item		Unit	Test method	Typical value
Density@23°C		g/cm <sup>3</sup>	ASTM D792	1.12
Tensile strength		MPa	IEC 60811-1-1	16.5
Elongation at break		%		320
Impact embrittlement performance@-40°C	Failure number	Piece	ASTM D746	0/30
After aging @135°C, 168h	Tensile strength variation	%	IEC 60811-1-2	+9
	Breaking elongation variation	%		-3
Hot prolongation@200°C, 0.2MPa, 15min	Elongation under the load	%	IEC 60811-2-1	48
	Permanent deformation	%		-3
Volume resistivity@20°C		Ω·cm	ASTM D257	30
Volume resistivity@90°C		Ω·cm	ASTM D257	298

### Processing

Recommend for polyethylene specific extruder. Draw ratio is from 18:1 to 25:1 and other equipment need to 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 °C	75	85	105	115	115	115	115	115

- 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.