



ZC-5327 Irradiation Crosslinkable LSZH Sheath Compound for Photovoltaic Cable(125℃)

This material is used for halogen-free flame retardant(irradiation cross-linkable) wire and cable insulation material. It is made of high quality resin, flame retardant, antioxidant agent and cross-linking agent by mixing granulation. None-halogen property makes the materials non-toxic when burning; it has excellent flame retardancy, good physical and mechanical properties and processing performance; Heat resistance level is 125℃, can pass the VD-1 combustion test.

Standard: TUV 2PFG 1169; UL4703; CEEIA B218

Application: Photovoltaic system/solar panel; Wire and cable; Control wire and cable; Railway wire and cable

Property

Item		Unit	Test method	Typical value
Density@23℃		g/cm ³	ASTM D792	≤1.42
Tensile strength		MPa	IEC 60811-1-1	14.2
Elongation at break		%		175
After aging @150℃, 168h	Tensile strength retention	%	IEC 60811-1-2	105
	Breaking elongation retention	%		88
After aging @185℃, 100h	Tensile strength variation	%	IEC 60811-1-2	95
	Breaking elongation variation	%		75
Hot prolongation@200℃, 0.2MPa, 15min	Elongation under the load	%	IEC 60811-2-1	35-45
	Permanent deformation	%		0
Low temperature bending test@-40℃, 16h		—	IEC 60811-1-4	No crack
Combustion test		—	IEC 60332-1	VD-1
The halogen acid gas content		mg/g	IEC 60754-1	none
pH		—	IEC 60754-2	5
Electrical conductivity		μS/mm	IEC 60754-2	3.8
Dielectric strength@20℃		MV/mm	IEC 60243-1	20
Volume resistivity@20℃		Ω·cm	ASTM D257	5×10 ¹³
Hardness		Shore A	ASTM D2240	93
The irradiation condition: hot prolongation(25% to 40%)		%	—	25-35

Processing

Recommend to use conventional single screw extruder and specific low smoke halogen-free screw.

Zone	1	2	3	4	5	6	Neck	Head
Temperature Range℃	135	145	150	155	160	165	170	170

- 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; Best use within six months from the date of production.

Product packing

25kg in moisture resistant aluminum laminated bags with composite paper bags outside; palletized bottom.