

Cable Compounds

Easy strippable semi conductive thermoset shielding, YLS

E8458 is a conductive thermoset compound intended for lead free EPR cable with low to medium stripforce. Can be used in both steam cure and dry cure process. Typically lead free insulation.

Specifications

E8458 meets the requirements as below, when optimal processing extrusion and end testing procedure are used:

- AEIC CS 5/94
- BS 6622
- HN 33-S-23 (EDF)
- IEC 60502
- IEC 60840
- NF CS 32/321
- VDE 0273 / 12.87
- SS 424 14 16, SS 424 14 17 (HD 620 S1:1996)

Typical physical properties:

Property	Test method	Unit	Typical Value
Density at 23°C/74°F	ASTM D1928	g/cm ³	1,18
Hardness Shore A	ASTM D2240	Shore A	85-90
Hot set 200°C/392°F, 20 N/cm ²	IEC 540	%	35/5
Moisture	QAHC-10420, (Karl Fischer method)	PPM	< 800
Tensile strength	ASTM D638	MPa	11
Elongation	ASTM D638	%	250
Mooney viscosity ML (1+4) at 121°C/250°F	ISO 289	MU	24

Typical electrical properties:

Property	Test method	Unit	Typical Value
DC Volume Resistivity of Cable at 23°C/74°F	ASTM D257	Ohm cm	< 400
DC Volume Resistivity of Cable at 90°C/194°F	ASTM D257	Ohm cm	< 500
DC Volume Resistivity of Cable at 120°C/248°F	ASTM D257	Ohm cm	< 500

Insulation shield adhesion (typical values on steam cured insulation type ECC ERI3758):

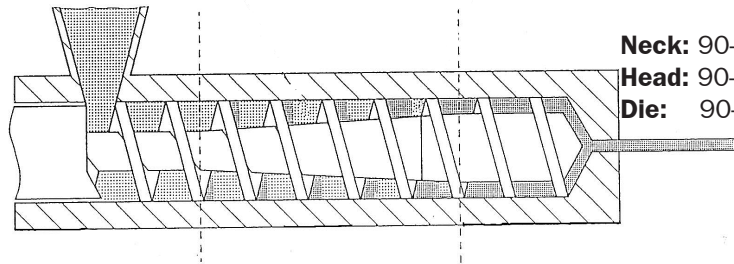
Property	Stripping angle/speed	Unit	Typical Value
Stripping force at 23°C/74°F	180°/(50 mm/min)	N/cm	10
Stripping force at 23°C/74°F	90°/(250 mm/min)	lbf/half inch	8

Processing conditions

E8458 provides an excellent surface finish when processing conditions are optimised for the actual processing equipment. Actual conditions will vary according to the equipment used, but as a guide we recommend following extrusion conditions:

Desiccant dryer: < 40 °C/104°F

Hopper: -



Neck: 90-120°C/194-248°F

Head: 90-120°C/194-248°F

Die: 90-120°C/194-248°F

Screw cooling: °C/F

Comments: -

Extruder

Hopper inlet: RT (room temperature)

Barrel: 60-100°C/140-212°F

Delivery

Form: Pellets

Package: Octabin with net weight of 600 kg (132 lb.)

Storage/Handling

The material is packed, secured and sealed fulfilling the stated properties above. The material shall be stored in sealed container and under dry and tempered conditions to obtain sustainable performance.

Safety

At temperatures above 230°C there is a risk that acetic acid may be formed.

It is recommended to keep process temperature <260°C.

Safety data sheet is available upon request.

The data sheet should be considered as guidelines, not binding information.

Issue date 2016-03-03. We reserve the right to make changes without prior notification.



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