Cable Compounds

Bonded semiconductive shielding and conductor screen

E8201 is a conductive thermoset compound intended for dry cure process both EPR and especially TR-XLPE.

Specifications

E8201 meets the requirements as below, when optimal processing extrusion and end testing procedure are used:

- AEIC CS8 (latest edition)
- BS 6622
- IEC 60502
- NF C 33-223
- NEMA WC 7-1996/ICEA S-95-658

Typical physical properties:

Property	Test method	Unit	Typical Value
Density at 23°C	ASTM D1928	g/cm³	1,21
Hardness Shore A	ASTM D2240	Shore A	85-90
Hot set 200°C, 20 N/cm²	IEC 540	%	35
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	ISO 289	MU	27

Typical electrical properties:

| Property	Test method	Unit	Typical Value
DC Volume Resistivity of Cable at 23°C	ASTM D257	Ohm cm	< 200
DC Volume Resistivity of Cable at 90°C	ASTM D257	Ohm cm	< 1000
DC Volume Resistivity of Cable at 120°C	ASTM D257	Ohm cm	< 1000

Insulation shield adhesion:

Property		Unit	Typical Value
Stripping angle/speed	180°/(50 mm/min)		
Stripping force, EPR, 23°C		N/cm	< 8

Processing conditions

E8201 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
Hopper: -
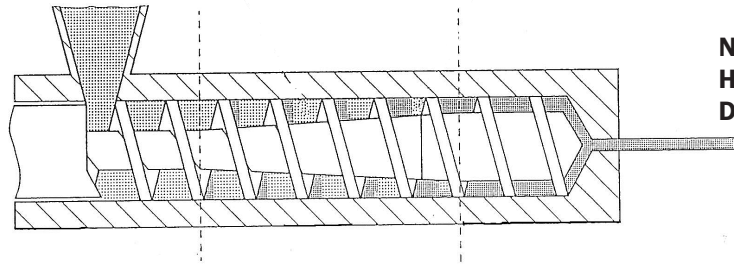
Neck: 100-130°C
Head: 100-130°C
Die: 100-130°C

Screw cooling: -°C
Comments: -

Extruder
Hopper inlet: 50-70°C
Barrel: 60-110°C

Delivery

Form: Pellets
Package: 600 kg octabin with aluminium liner

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

Safety data sheet is available upon request.

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

Issue date 2014-03-14. We reserve the right to make changes without prior notification.