

## Strippable semiconductive shielding

### Description

E8551 is a crosslinkable, strippable semiconductive compound, designed for both XLPE and EPDM rubber insulated cables and use in both dry and steam curing processes.

### Specifications

E8551 meets the requirements as below, when optimal processing extrusion and end testing procedure are used:

AEIC CS 8 (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/cm <sup>3</sup>	1,18
Hardness Shore A	ASTM D2240	Shore A	85-90
Hot set 200°C, 20 N/cm <sup>2</sup>	IEC 540	%	60/20
Moisture	QAHC-10420 (Karl Fischer method)	PPM	< 800
Tensile strength	ASTM D638	MPa	11
Elongation	ASTM D638	%	220
Mooney viscosity ML (1+4) @ 121°C	ISO 289	MU	19

### Change after ageing 1 week at 135°C

Tensile strength	ASTM D638	%	-10
Elongation	ASTM D638	%	-30

### Typical electrical properties

#### DC Volume Resistivity of Cable

at 23°C	ASTM D257	Ohm cm	< 500
at 90°C	ASTM D257	Ohm cm	< 1000
at 120°C	ASTM D257	Ohm cm	< 1000

#### Insulation shield adhesion (typical values)

Stripping angle			180°
Stripping force, XPLPE, 23°C (50mm/min)		N/cm	7-10
Stripping force, EPR, 23°C (50mm/min)		N/cm	15-20

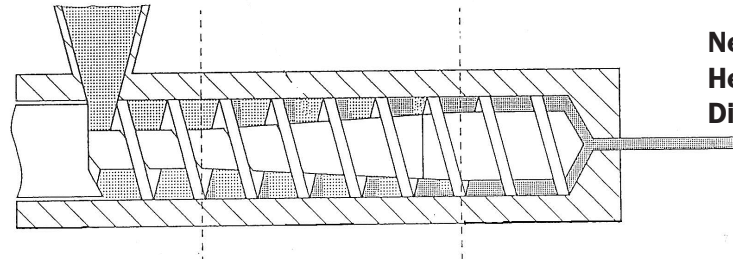
## Processing conditions

E8551 provides an excellent surface 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:** RT (room temperature)

**Barrel:** 60-110°C

## Delivery

Form: Pellets

Package: 600 kg cardboard boxes

## 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 180°C acetic acid may be formed. Safety data sheet is available upon request.

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

Issue date 2010-08-27. We reserve the right to make changes without prior notification.



**Trelleborg Material & Mixing Forsheda AB**

P.O.Box 1004, SE-331 29 Värnamo, Sweden.

Visiting address: Storgatan 28, 33012 Forsheda Sweden.

Tel +46 370 481 00, Fax +46 370 485 72

E-mail: [cablesolutions@trelleborg.com](mailto:cablesolutions@trelleborg.com) [www.Trelleborg.com/cablesolutions](http://www.Trelleborg.com/cablesolutions)