

# Cable Compounds

## Easy strippable semi conductive thermoset shielding, YLS

**E8435** is a conductive thermoset compound intended for EPR cable with medium stripforce. Can also be used on XLPE with low stripforce. Can be used in both steam cure and dry cure process.

### Specifications

**E8435** 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/cm <sup>3</sup> | 1,19          |
| Hardness Shore A                    | ASTM D2240                        | Shore A           | 85-90         |
| Hot set 200°C, 20 N/cm <sup>2</sup> | IEC 540                           | %                 | < 50          |
| Moisture                            | QAHC-10420, (Karl Fischer method) | PPM               | < 800         |
| Tensile strength                    | ASTM D638                         | MPa               | 11            |
| Elongation                          | ASTM D638                         | %                 | > 200         |
| Mooney viscosity ML (1+4) at 121°C  | ISO 289                           | MU                | 30            |

### Typical electrical properties:

| Property                                | Test method | Unit   | Typical Value |
|---|-------------|--------|---------------|
| DC Volume Resistivity of Cable at 23°C  | ASTM D257   | Ohm cm | < 100         |
| 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:

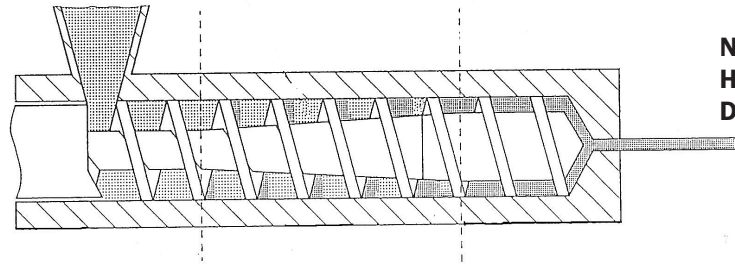
| Property                                | Unit             | Typical Value |
|---|------------------|---------------|
| Stripping angle/speed                   | 180°/(50 mm/min) |               |
| Stripping force, XLPE, 23°C (50 mm/min) | N/cm             | 10            |
| Stripping force, EPR, 23°C (50 mm/min)  | N/cm             | 15-20         |

### Processing conditions

**E8435** 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:** 40-60°C

**Barrel:** 60-110°C

### Delivery

Form: Pellets

Package: 600 kg octabin

### 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 2016-02-10. We reserve the right to make changes without prior notification.

