

## Compound SC-002

*Black radiation crosslinkable semi-conductive compound for heat-shrinkable tubing  
For applications in cable terminations and joints up to 36 kV.*

### Compound properties

Compound SC-002 is a radiation crosslinkable compound offering excellent semi-conductive properties and is intended to be used on cable joints or cable terminations.

The carefully selected combination of polymers, fillers, processing aids and additives has resulted in a compound combining good electrical performance with optimal physical properties.

The compound is easy processable and shall be extruded on low compression screws.

### Compound characteristics:

<u>Property</u>	<u>Test Method</u>	<u>Typical Value</u>
Specific gravity	ASTM D 792	1.00gr/cm <sup>3</sup>
MFI (190°C/10.0kg)	ASTM D 1238	4 –8 cm <sup>3</sup> /10min
Tensile Strength	DIN 53504 (S1) 200mm/min	10.0 N/mm <sup>2</sup>
Elongation @ break	DIN 53504 (S1) 200mm/min	350 %

### Processing

#### Extrusion

Recommended extrusion temperature profile:	125°C-130°C-140°C-150°C-155°C
Recommended draw-down ratio :	< 1.1 : 1
Recommended drying time ( Dry Air ) :	4 hr@50°C

#### Crosslinking

Recommended radiation dose :	65kGy
Hot-set elongation :	200 - 290% (150°C/20N/cm <sup>2</sup> load)

### Packaging:

It is recommended to pack the compound in sealed ALU bags of 25 kg.

We recommend to store the compound below 30°C. Shelf Life : minimum 6 months

*It is recommended to process this compound on an extruder which processes polyolefin compounds only. Should this compound be processed on an extruder, which is also used for processing other compounds, the screw, extruder head, tooling and other devices should be cleaned very well. Any dirt, irregularities and contaminations, due to bad cleaning could result in pinholes or 'blow-outs' during the expansion process or result in mal-functioning of the final semi-conductive tubing.*

### **Smaron bv**

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### Tubing properties after Crosslinking

Heat-shrinkable tubing produced on basis of this compound will show superior semi-conductive characteristics due to the carefully controlled volume resistivity. Easy and quick installation.

<u>Property</u>	<u>Test Method</u>	<u>Typical value (*)</u>
<u>Physical</u>		
Tensile strength at break	ASTM D 638	10N/mm <sup>2</sup>
Elongation at break	ASTM D 638	500%
Density	ASTM D 792	0.95 g/cm <sup>3</sup>
Water Absorption	ISO 62	0.5%
Hardness	ASTM D 2240	25 Shore D
<u>Thermal</u>		
Continuous operating temperature	Internal Method	-55°C to +125°C
<u>Electrical</u>		
Volume resistivity	ASTM D 257	3.0 x 10 <sup>5</sup> Ωcm

(\*): Typical values can only be achieved if compound is processed according to our recommendations

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#### **Smaron datasheet SC-002**

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*Notice : The information given in this datasheet is believed to be accurate and reliable. However, no warranty, express or implied, or guarantee is given as to the suitability, accuracy, reliability or completeness of the information. This information does not hold us liable for damages or penalties resulting from following our suggestions or recommendations.*

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