



Polyethylene

# Supercure™ LS4201S

Crosslinkable Insulation Compound

## Description

**Supercure LS4201S** is a crosslinkable natural polyethylene compound, specially designed for insulation applications.

## Applications

**Supercure LS4201S** is intended for insulation of XLPE High Voltage cables with rated voltages up to 220 kV.

## Specifications

**Supercure LS4201S** meets the applicable requirements as below when processed using sound extrusion practice and testing procedure:

AEIC CS7-93 (3rd edition)  
HD 632 S1

IEC 60840  
ANSI/ICEA 108-720-2004

## Special features

**Supercure LS4201S** is a ready-to-use natural compound. It is specially developed for high productivity through a reduced degassing burden and with an enhanced extrusion performance. The cleanliness property and excellent distribution of additives in Supercure LS4201S would result in superclean insulation.

## Physical Properties

Property	Typical Value	Test Method
Data should not be used for specification work		
Density (Base Resin)	922 kg/m <sup>3</sup>	ISO 1872-2/ISO 1183
Melt Flow Rate (190 °C/2,16 kg) <sup>1</sup>	2 g/10min	ISO 1133
Tensile Strain at Break (250 mm/min) <sup>2</sup>	> 450 %	ISO 527
Tensile Strength (250 mm/min) <sup>2</sup>	> 17 MPa	ISO 527
Retention of Tensile Properties After Ageing (500 h, 135 °C) <sup>2</sup>	< 20 %	IEC 60811-1-2
Hot Set Test (200 °C, 0,20 MPa)	Elongation under load Permanent deformation	75 % 5 % IEC 60811-2-1
Göttfert Elastograph	0,56 - 0,67 Nm	
Methanol Wash	< 800 ppm	
Moisture	< 200 ppm	Karl Fischer-titration

<sup>1</sup> Base Resin

<sup>2</sup> Measured on crosslinked specimens





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## Electrical Properties

Property	Typical Value	Test Method
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Dielectric constant (50 Hz)	2,3	IEC 60250
DC Volume Resistivity	> 10 POhm.cm	IEC 60093
Dielectric Strength (50 Hz)	> 30 kV/mm	IEC 60243
Dissipation Factor (50 Hz)	0,0005	IEC 60250

## Processing Techniques

To produce a good and reliable cable, it is essential to ensure careful and very clean handling of the insulation material. Hence all material handling should preferably be conducted in closed systems and in clean room conditions. Practical advice is given in a separate brochure. Please contact your Borealis representative for more details.

### Extrusion

Melt temperature 130 - 140 °C

## Packaging

Package: Smallbins  
Octabins

## Storage

**Supercure LS4201S** has a shelf life of 12 months from delivery date if stored in unopened original packages, under dry and clean conditions at temperatures between 15 - 25 °C.

More information on storage is found in our Safety Data Sheet for this product.

## Safety

The product is not classified as a dangerous preparation and is intended for industrial use only. Check and follow local codes and regulations!

Please see our Safety Data Sheet for details on various aspects of safety of the product, for more information contact your Borealis representative.





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## Disclaimer

**The product(s) mentioned herein are not intended to be used for medical, pharmaceutical or healthcare applications and we do not support their use for such applications.**

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