Borlink™ LS4201EHV – Bringing the benefits of Supercure to Extra High Voltage



Introducing Borlink™ LS4201EHV

Building further on the excellent track record of Borlink™ LS4201S in the high voltage application, the introduction of Borlink LS4201EHV brings the benefits of the Supercure technology to the most demanding Extra High Voltage application including sub-marine cables.

Borlink LS4201EHV builds on the outstanding cleanliness (E-specification) associated with the classic Borlink LE4201EHV grade, merging that cleanliness characteristic with lower degassing burden and improved scorch performance. Borlink LS4201EHV provides valuable benefits for the cable manufacturers in terms of improved processing and optimised production cycle. Borlink LS4201EHV is produced based on base resin from the state of the art high pressure plant inaugurated in Stenungsund, Sweden in 2010. The insulation system combining Borlink LS4201EHV and Borlink LE0500 provides the superior performance for the most demanding application.

Borlink LS4201EHV is designed to provide:

- Performance in accordance to IEC62067
- Improved scorch performance compared to the classic Borlink LE4201EHV
- Reduced degassing burden compared to the classic Borlink LE4201EHV
- More robust compatibility with additives





Borlink™ LS4201EHV - Property Profile

Physical Properties

Property	Typical value*	Test method
Density (Base Resin)	922 kg/m³	ISO 1183
Melt Flow Rate (190 °C/2.16 kg)1	2g/10min	ISO 1133
Tensile Strain at Break (250 mm/min) ²	>450%	ISO 527
Tensile Strain (250 mm/min) ²	>17 MPa	ISO 527
Change of Tensile Properties After Ageing (168 h, 135 °C) ²	<20%	IEC 60811-401
Hot Set Test (200 °C, 0.20 MPa)	Elongation under load 75% Permanent deformation 5%	IEC 60811-507
MDR	Max. torque 2.9 - 3.8 dNm	ISO 6502
Scorch Time (t10)	>1.0 min	ISO 6502
Methanol Wash³	<800 ppm	BTM 00118
Moisture	<200 ppm	Karl Fischer-titration

^{*} Data should not be used for specification work, ¹Base Resin, ²Measured on crosslinked specimens, ³BTM = Borealis Test Method

Electrical Properties

Property	Typical value*	Test method
Dielectric constant (50 Hz)	2.3	IEC 60250
DC Volume Resistivity	>10 POhm.cm	IEC 60093
Dissipation Factor (50 Hz)	0.0003	IEC 60250

^{*} Data should not be used for specification work

Bringing energy all around | Date of issue: March 2018

About Borealis Borealis is a leading provider of innovative solutions in the fields of polyolefins, base chemicals and fertilizers. With its head office in Vienna, Austria, the company currently has around 6,600 employees and operates in over 120 countries. Borealis generated EUR 7.5 billion in sales revenue and a net profit of EUR 1,095 million in 2017. Mubadala, through its holding company, owns 64% of the company, with the remaining 460 employees and products to customers around the world in collaboration with Borouge, a joint venture with the Abu Dhabi National Oil Company (ADNOC).

Borealis and Borouge aim to proactively benefit society by taking on real societal challenges and offering real solutions. Both companies are committed to the principles of Responsible Care®, an initiative to improve safety performance within the chemical industry, and work to solve the world's water and sanitation challenges through product innovation and their Water for the World programme.

 $\textbf{For more information visit:} \ www.borealisgroup.com \cdot www.borouge.com \cdot www.waterfortheworld.net or www.borouge.com \cdot www.borouge.com \cdot www.borouge.com \cdot www.waterfortheworld.net or www.water$

Disclaimer The information contained herein is to our knowledge accurate and reliable as of the date of publication. Borealis and Borouge extend no warranties and make no representations as to the accuracy or completeness of the information contained herein, and assume no responsibility regarding the consequences of its use or for any errors. It is the customer's responsibility to inspect and heat our products in order to satisfy himself as to the suitability of the products for the customer's particular purpose. The customer is also responsible for the appropriate, safe and legal use, processing and handling of our products. Nothing herein shall constitute any warranty (express or implied, of merchantability, fitness for a particular purpose, compliance with performance indicators, conformity to samples or models, non-infringement or otherwise), nor is protection from any law or patent to be inferred. Insofar as products supplied by Borealis and Borouge are used in conjunction with third-party materials, it is the responsibility of the customer to obtain all necessary information relating to the third-party materials and ensure that Borealis and Borouge products, when used together with these materials, are suitable for the customer's particular purpose. No liability can be accepted in respect of the use of Borealis and Borouge products in conjunction with other materials. The information contained herein relates exclusively to our products when not used in conjunction with any third-party materials.

Borlink is a trademark of the Borealis Group.

For more information:

visit www.borealisgroup.com and www.borouge.com

Borealis AG · IZD Tower

Wagramer Strasse 17–19 \cdot A-1220 Vienna \cdot Austria Tel +43 1 22 400 000 \cdot Fax +43 1 22 400 333

Borouge Pte Ltd \cdot Sales and Marketing Head Office

1 George Street 18-01 · Singapore 049145



