

Pultrusion
Epoxies Compatible

Advantex® glass

SE 8400 LS rovings are made of Advantex® glass fibres.

Advantex® glass is an electrical grade boron-free glass that shows significantly improved corrosion resistance across a wide range of aggressive environments. It is defined as an E-CR glass per ASTM D578 and ISO 2078 standards.

This translates into significant benefits over E glass; one of it being resistance to brittle fracture of composite insulators' cores when submitted to stress-corrosion induced by acid attack. Use of E-CR Advantex® glass leads to longer service life, higher safety margins and then material costs savings over traditional E-glass.

Also E-CR Advantex® glass contains neither boron nor added fluorides that makes this glass the recognized benchmark in the glass fibre industry for clean manufacturing.

E-CR Advantex® glass fibre formulation and manufacturing technology is a perfect example of integrated pollution prevention and the highest energy efficiency converging in an optimized process.

SE 8400 LS Electrical Grade Glass Fibre

For the Highest Quality Composite Insulators



Product description

SE 8400 LS Direct Rovings made of E-CR Advantex® glass are continuous single strands that are easily processable by pultrusion thanks to their tailored binder chemistry.

SE 8400 LS rovings also show very low level of hollow fibres as a consequence of 3B's unique know-how in glass fiberizing.

As a result, SE 8400 LS made insulators' cores are passing acceptance criteria of core material tests of IEC 62217, even with

Astrazon® dye; they are then used in the manufacturing of solid composite cores of suspension, tension and line post overhead lines insulators, station post and railways insulators designed according to their respective IEC standards.

3B's SE 8400 LS is also globally recognized as the highest quality glass when it deals with design of the most stringent requirements of Transmission insulators.

FEATURES	BENEFITS
Boron-free E-CR electrical glass	Provides stress-corrosion resistance and avoids brittle fracture of insulators as investigated by International Council on Large High Voltage Electric Systems (Working Group B2.03)
Very low level of hollow fibres	Acceptance at core material tests (dye penetration, water diffusion) as specified by IEC 62217 standard. Enables manufacturing of insulator types meeting IEC 61109:2008, IEC 61952:2008, IEC 62231:2006 & IEC 61462:2007.
Suitable for Astrazon® dye penetration test (Astrazon® is a trademark of DyeStar)	Enables the manufacturing of the best quality insulators
Globally available	Get flexibility in manufacturing the highest quality composites insulators wherever you are.

SE 8400 LS Electrical Grade Glass Fibre

For the Highest Quality Composite Insulators

PRODUCT PORTFOLIO & GENERAL PROPERTIES

Product name	Filament diameter	Linear density	Bobbin	Packaging
	µm	tex (gr/km)	type	
SE 8400 LS	24	2400	C	See below
SE 8400 LS	24	4800	C	See below
SE 8400 LS	34	9600	C	See below
Fibre density	2.62 gr/cc			
Tensile Strength	2630 MPa	ASTM D2343-08		
(epoxy system Hexion L135i / H137i)	71% glass weight)			
	75 GPa	ASTM D2343-08		
(epoxy system Hexion L135i / H137i)	71% glass weight)			

PACKAGING

Bobbins are individually wrapped with a protective stretched film that improves handling and allows optimum transfer from bobbin to bobbin.

Bobbin's nominal weight is 25 kg (C type).

Two types of pallet configurations are available:

- Bulk-Pack: standard packaging, consists of individual bobbins,
- Creel-Pack: bobbins are connected together for a continuous unwinding process and no bobbins handling for operators.

Standard pallets are 1150 mm x 1150 mm x 1200 mm (height), however 3B can support any Customer's request for tailored packaging.

STORAGE

Storage in a cool and dry warehouse into the original packaging is formally recommended. More precisely ideal storage conditions are a temperature between 15°C and 35°C and a relative humidity comprised between 35% and 75%.

If these conditions are maintained, the glass fibre product should not undergo significant changes when stored for extended periods of time. It is also strongly recommended to condition it in the workshop for at least 24 hours before use to prevent condensation.

For an optimal processing we recommend to use the product in ambient conditions (20°C-23°C and a relative humidity of 60%-65%).



Customer Service office :

I. Vandammestraat 5-7 Bat B

B-1560 Hoeilaart, Belgium

phone +32 2 402 2000

fax +32 2 402 2002

General info: 3B.info@3b-fibreglass.com

Disclaimer of Liability This data is offered solely as a guide in the selection of a reinforcement. The information contained in this publication is based on actual laboratory data and/or field test experience. We believe this information to be reliable, but do not guarantee its applicability to the user's process or assume any liability arising out of its use or performance. The user, by accepting

the products and/or services described herein, agrees to be responsible for thoroughly testing any application to determine its suitability before committing to production. It is important for the user to determine the properties of its own commercial compounds when using this or any other reinforcement.

BECAUSE OF NUMEROUS FACTORS AFFECTING RESULTS, WE MAKE NO WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. STATEMENTS IN THIS DATA SHEET SHALL NOT BE CONSTRUED AS REPRESENTATIONS OR WARRANTIES OR AS INDUCEMENTS TO INFRINGE ANY PATENT OR VIOLATE ANY LAW, SAFETY CODE OR INSURANCE REGULATION.