

High Performance
Long Fibre Thermoplastic
(LFT Pultrusion)

E-CR glass

3B E-CR glass is boron-free and presents significantly improved corrosion resistance across a wide range of aggressive environments.

3B glass is E-CR according to ASTM D578 and ISO 2078.

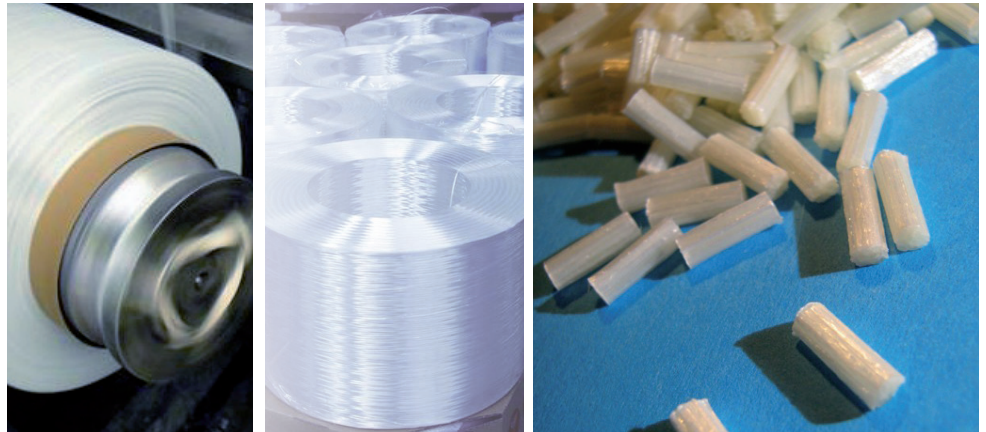
This translates into important benefits for end-users over traditional E-glass: longer service life, larger safety coefficients for the same design, and material savings. Traditional E-glass includes boron and often contains added fluorides. By using new manufacturing technology to eliminate these components from the glass composition, 3B E-CR glass has become a benchmark for integrated pollution prevention and the highest energy efficiency – all in an optimized process.

3B measures its efforts and works continually to minimize its impact on the environment and to set new standards within the global glassfibre industry. This is our commitment.

www.3B-fibreglass.com

SE 4535 (12µm) - High Performance

Direct Roving for Polyamides Reinforcement



Product Description

SE 4535 corresponds to 3B's portfolio of direct roving glassfibre designed to reinforce polyamides. Made out of E-CR glass, these direct roving fibres consist of continuous filaments bonded together into a single strand and wound into a cylindrical shaped bobbin.

SE 4535 (12µm) corresponds to an E-CR glass made direct roving whose strand consists of gathered 12µm diameter glass filaments for reinforcing polyamides.

This 12µm low filament diameter product is dedicated to polyamide composite parts that require the highest strength and

the best toughness. SE 4535 (12µm) is compatible with both families of Aliphatic (homopolymers & copolymers) and semi-aromatic (PPA) polyamides.

SE 4535 (12µm) direct roving is internal or external pull and is designed for Long Fibre Thermoplastic Pultrusion used to produce pellets.

SE 4535 (12µm) direct roving is available in 1200 tex linear density.

Please contact us for grades that are not yet part of SE 4535 product portfolio.

FEATURES	BENEFITS
Excellent compatibility with various PA resins	One fits all High mechanical performances
Specific bobbin construction	Usable in internal and external pull
Outstanding spreadability	Low fuzz generation for less clean up and improved process efficiencies High speed processability Superior pelletization quality Very good dispersion in the final PA parts
12µm low filament diameter	Enhanced toughness. Enhanced strength for better crash performances.

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PRODUCT PORTFOLIO

Product Name	Filament Diameter		Linear Density yield	# filaments per strand	Favoured process
	µm	tex			
SE 4535	12	1200	413	4000	LFT Pultrusion

FIBRE PROPERTIES

Density	CLTE (ASTM D696)	Tensile Strength (ASTM D2343-08)	Tensile Modulus (ASTM D2343-08)	Tensile Strain (ASTM D2343-08)
2.62 gr/cm ³	6.10 ⁻⁶ K ⁻¹	2200-2400 MPa 319-348 ksi	81 GPa 11748 ksi	2.7 - 2.9%

PACKAGING

Bulk-Pack® packaging of SE 4535 (12µm) consists of 1150 mm x 1150 mm x 1200 mm (45.3 in x 45.3 in x 47.2 in) (L x w x h) pallet containing individual bobbins evenly distributed on 4 layers.

Packaging's net weight is close to 1050 kg (2317 lb), average bobbin's weight being close to 24 kg (52.91 lb).

May you wish other types of packaging (spliced bobbins for continuous machine feeding for instance) or other packaging configurations, please contact us.

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 (59°F) and 35°C (95°F) and a relative humidity comprised between 35% and 75%. If these conditions are maintained, the glassfibre 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 (20-23°C / 68-73°F, and a relative humidity of 60-65%).

Binani



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