



INNOVATIONS FOR LIVING™

SE 1500 Roving Single-End Roving for Weaving and Knitting

PRODUCT DESCRIPTION

Single-End Rovings are produced by pulling individual fibers directly from the bushing and winding them onto a roving package ready for shipment. The uniform distribution of a proprietary sizing system ensures an excellent resin-to-glass binding through uniform distribution of the binding agent.

Single-End Rovings are manufactured using the T30® Roving state-of-the-art technology of Owens Corning, in conjunction with statistical process control in manufacturing facilities certified to ISO 9001.

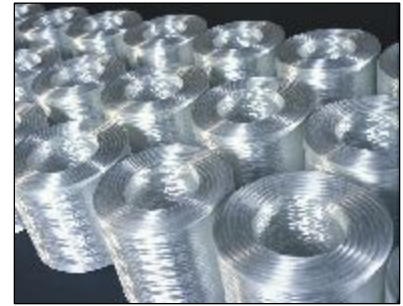
PRODUCT APPLICATION

SE 1500 roving is specially designed for use in weaving and knitting operations where end use applications contain epoxy resins (anhydride and amine systems). It is not recommended to use SE 1500 Single-End Roving with non-epoxy resins.

SE 1500 roving is designed for applications such as woven, knitted, and multi-axial fabrics or pre-pregs, where enhanced fatigue performances are needed, such as automotive leaf springs and windmill blades SE 1500 roving is also suitable for use in filament wound pipe, tubes or tanks

Advantex® Glass is an Owens Corning patented glass formulation, which meets ASTM D 578 and ISO 2078, as a boron-free corrosion resistant E-CR glass fiber. Advantex® Glass has been providing superior corrosion resistance vs. standard E-glass, since 1996, leading to longer part life and greater service life strength in applications facing corrosion, opening new markets for composites and our customers. Advantex® glass fiber reinforcements combine the electrical and mechanical properties of traditional E-glass with the acid corrosion resistance of E-CR glass. For additional information on Advantex® use the link below.

<http://composites.owenscorning.com/aboutAdvantex.aspx>



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FEATURES AND PRODUCT BENEFITS

- | | |
|---|--|
| • Excellent processing | • Low fuzz properties which equate to low clean-up and high machines efficiencies |
| • Multi-process compatible | • Excellent package run out and transfer with Tack-Pak® packaging |
| • Excellent strand opening and spreading | • For use on standard weaving looms as well as multi-axial knitting machines |
| • Designed for epoxy resin compatibility | • Also suitable for filament winding and pultrusion, |
| • Excellent laminate strength and fatigue properties | • Fast wet-out and high resin pick-up equating to increased quality in parts visual aspect after molding |
| • Available globally | • Provides high fatigue properties allowing this product to be qualified for wind energy. |
| • Superior corrosion resistance with Advantex® Glass compared to standard E-glass | • Global manufacturers can use product in all regions resulting in lower design and qualifications costs. |
| | • Advantex® Glass provides superior corrosion resistance vs. standard E-glass, leading to longer part life and greater service life strength in applications facing corrosion. |

SE 1500 Roving

Single End Roving for Weaving and Knitting

PRODUCT AVAILABILITY

| Yield | Tex |
|---------------|---------------------------------|
| 825, 413, 207 | 300, 600, 900, 1200, 2400, 4800 |

MECHANICAL PROPERTIES

The following data was generated using production material SE 1500 roving – 1200 Tex (413 Yield)

| Strand Tensiles : ASTM D 2343 | Strength (MPa) | Strength (Ksi) |
|----------------------------------|----------------|----------------|
| Amine IPDA/ Epon 826 Epoxy resin | 2430 | 350 |

| Interlaminar Shear Strength NOL ring : ASTM D 2344 | Dry shear strength (MPa) | Dry shear strength (psi) | shear strength Retention 72 hr boil (%) |
|---|-----------------------------|-----------------------------|---|
| Amine IPDA/ Epon 826 Epoxy resin | 62.7 | 9100 | 96% |

PACKAGING

Rovings are available in a single-end internal-pull package. Each pallet weighed about 1 ton. Pallets are stretch wrapped for load stability. All doffs are wrapped with Tack-Pak® or shrinkable film for protection during transport. Full doffs are available in weights between 20 kg (45 lb.) and 27 kg (60 lb.), and they can be packaged in bulk or Creel-Pak® format. More information is available in the Customer Acceptance Standards.

STORAGE

It is recommended to store glass fiber products in a cool, dry area. The glass fiber products must remain in their original packaging material until the point of usage; the product should be stored in the workshop, within its original packaging, 48 hours prior to its utilization, to allow it to reach the workshop temperature condition and prevent condensation, especially during cold season. The packaging is not waterproof. Be sure to protect the product from the weather and other sources of water.

It is recommended products be used within 18 months of manufacture, as some product performance criteria may evolve beyond that time.



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