



SE4805 HP HIGHER MECHANICAL PERFORMANCE

Single end roving designed for polypropylene long-fiber thermoplastics applications.

SE4805 HP single-end Type30™ roving is specifically designed as a higher performance solution for compounders seeking increased productivity through improved processing and handling characteristics, and excellent compatibility in Polypropylene LFT applications in manufacturing facilities certified to ISO 9001.

- Produced with patented higher performance glass by Owens Corning (OC HP) the product provides superior mechanical properties with the excellent corrosion resistance expected from our Advantex® formulations.
- Compatible with Polyolefins: PP, PE and HDPE resin systems.

Product Benefits

For Compounders

2.5%

potential weight reduction in compound.

For OEMs

9%

weight reduction by reducing part thickness.

Lightweighting

- 9% weight reduction by reducing LFTP part thickness – ideal for automotive lightweighting.
- 2.5% potential weight reduction in LFTP compound.

Superior Glass Dispersion/Increased Part Strength

- Outstanding compatibility with Polyolefins, enabling better wet-out, uniform glass dispersion and potential higher glass loading.
- Optimized adhesion to the polymer matrix offering excellent mechanical properties to meet stringent end-use requirement.

Enhanced Service Life

- Like Advantex glass, HP glass helps fight corrosion, enhancing service life compared to standard E-Glass.

Applications

SE4805 HP is an advanced member of the Type 30™ roving family and specially designed for polypropylene long-fiber thermoplastic applications with LFT-G (pultrusion), D-LFT and CFRT (Continuous Fiber Reinforced Thermoplastics). for the manufacturing of structural and semi-structural automotive applications including front-end modules, seat carriers and door modules, as well as a variety of consumer goods, appliances and power tools. SE4805 HP is also optimized for used in CFRT (Continuous Fiber Reinforced Plastic) tapes for structural applications where the performance characteristics of a continuous unidirectional glass reinforcement can significantly improve end-use performance.

Mechanical Properties

GC 30%	SE4805	SE4805HP	% IMPROVE
Glass Content (wt 5)	29.88	31.20	-
Tensile Strength (MPa)	123.28	139.20	13%
Tensile Modulus (GPa)	6.77	7.37	9%
Flexural Strength (MPa)	172.90	190.48	10%
Flexural Modulus (GPa)	6.46	6.96	8%
Notched Impact (KJ/m ²)	27.56	32.91	19%
Unnotched Impact	70.16	80.03	14%

Note: Data generated using production SE 4805 HP and standard SE 4805 HP for comparison. Both products were 2400 tex with 17 µm fibers, and were tested at 30% glass loading in a standard PP resin formulation.

Availability (Standard Reference) & Technical Characteristics (Nominal Values)

TEX	YIELD	FILAMENT DIAMETER (µ)	LOSS ON IGNITION (%)	MOISTURE (% MAX)	MANUFACTURING REGION
2400	207	17	0.35%	0.05%	Asia Pacific
1200	413	17	0.35%	0.05%	Asia Pacific
900	551	15	0.35%	0.05%	Asia Pacific

Packaging

Rovings are available in 25 kg single-end internal-pull packages. Pallets are stretch wrapped for load stability. Pallets are available in bulk pallet packaging format, and are manufactured in India for export globally.

Labeling

Each individual package is labeled with information including: product name, tex/yield, producing plant and production date.

Storage

Unless otherwise specified, 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 in its original packaging for 48 hours prior to its utilization, to allow it to reach the workshop temperature condition and prevent condensation, especially during the cold season. The packaging is not waterproof. Be sure to protect the product from the weather and other sources of water.

When stored properly, there is no known shelf life to the product, but retesting is advised after three years from the initial production date to insure optimum performance.



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