

# SE4121 HP HIGHER MECHANICAL PERFORMANCE

SE4121 HP single-end Type 30™ roving represents a compelling higher performance solution for Polypropylene Long Fiber Thermoplastics (LFT-G and D-LFT) applications where excellent mechanical properties and hydrolysis resistance are required.

- Produced with patented "High 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.

## **Application**

The SE4121 product is designed for use in all LFT-G (compounded pellets) and D-LFT (direct compounding and molding) processes. It is used 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.

# Mechanical **Properties**

Data generated using production material SE4121 2400 Tex (207 Yield).

TENSILE	TENSILE	FLEXURAL	FLEXURAL	IMPACT —	IMPACT —
STRENGTH	MODULUS	STRENGTH	MODULUS	NOTCHED CHARPY	UNNOTCHED CHARPY
+17%	+12%	+12%	+9%	+23%	

Note: Data generated using production SE4121 HP and standard SE4121 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	TEX	YIELD	FILAMENT DIAMETER (µ)	LOSS ON IGNITION (%)	MOISTURE (% MAX)
	2400	207	16	0.55	0.05

## **Packaging**

Rovings are available in 20 kg single end, internal pull. Pallet dimensions 16x4 rovings. Pallets are stretchwrapped 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 ensure optimum performance.

## **ISO Standards**

SE4121 single-end roving is manufactured in conformity with the following standards: ISO 2797, NF B38151 and DIN 61855.



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