

# SE4849 HP HIGHER MECHANICAL PERFORMANCE

SE4849 HP single-end Type  $30^{\rm m}$  roving represents a compelling solution for compounders seeking improved productivity through increased line speed, and the potential for higher glass loadings made possible with excellent dispersion.

- 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<sup>®</sup> 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**

SE4849 HP product is designed for use in LFT-G (pellets) Polyolefin (primarily PP) hot-melt compounding processes 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. SE4849 HP can also be 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 &** Performance **Testing** 

TENSILE	TENSILE	FLEXURAL	FLEXURAL	IMPACT —	IMPACT —
STRENGTH	MODULUS	STRENGTH	MODULUS	NOTCHED CHARPY	UNNOTCHED CHARPY
+16%	+10%	+7%	+3%	+22%	+9%

Note: Data generated using production SE4849 HP and standard SE4849 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)
1100	450	16	0.40%	0.05%
2400	207	17	0.40%	0.05%
4400	113	23	0.40%	0.05%
4800	103	24	0.40%	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**

SE4849 single-end roving is manufactured in conformity with the following standards: ISO 2797, NF B38151 and DIN 61855.



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