

ChopVantage[®] HP 3660

Chopped Fiber Glass



Product Description

CHOPVANTAGE HP 3660 chopped strands from NEG are designed to reinforce a wide range of polyamide (PA) resins and are intended for use in several cross-function PA applications. Superior whiteness, outstanding resistance to ethylene, glycol-derived engine coolants and next generation performance in impact-modified resins have been realized. **CHOPVANTAGE HP 3660** chopped strands are ideal for under-the-hood cooling system components such as radiator end tanks, intake manifolds, which incorporate coolant cross-over channels.

User Benefits

- Suitable for a wide range of polyamide thermoplastic resin systems: PA6, PA66, PA46, PA610, and PA612.
- Superior dry flow performance which contributes to high compounding rates, using both continuous feed and batch systems.
- Wide range of versatility with respect to feeding and handling.
- Tailored sizing system to provide uniform dispersion during the compounding operation.
- Excellent mechanical properties in impact modified systems.
- High fatigue resistance and temperature resistance.
- Outstanding hydrolysis resistance properties in long life coolant (LLC) systems.
- U.S. Food and Drug Administration and compliance for repeated-use food contact applications.
- APE Free, as well as, French and German potable water contact compliance.
- Other packaging, including smaller quantities of product, available upon request.
- Manufacturing facilities operate quality management systems that comply with ISO 9001:2015 requirements.

Packaging

America

- 1,000 kg Bulk Bag
- 612 kg (1,350 lb.) Corrugated Carton

Europe

- 1,000 kg or 1,100 kg Bulk Bag
- 1,100 kg Octabin

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 **Nippon Electric Glass**

Product Information

Type of Fiber	E-Glass (ASTM D 578-05, Section 4.2.2)
Type of Sizing	Silane
Standard Cut Length (mm)	3.2, 4.5
Average Fiber Diameter (µm)	10

Storage

These products should be stored in a dry area with ambient temperature and relative humidity, optimally from 20°C to 25°C and between 50% and 70%, respectively. Protect product from all sources of water at all times. A First-In-First-Out (FIFO) stock control system is recommended to minimize the influence of storage conditions. Prior to use, products should be conditioned in the work area for a minimum of 24 hours. If contents of a package unit are partially used, the unit should be closed until the next use. With proper storage, there are no known limitations on the shelf life of the product. To insure optimal performance, retesting is recommended for products stored more than two years from the initial production date.

Caution

To avoid the possibility of potential injury, maintain column stability by limiting pallet stacking to two (2) high as noted on individual shipping containers.

NOTE: This data is offered for informational purposes only in the selection of a composite reinforcement. The information contained in this bulletin is based on actual laboratory data. We believe that this information is reliable, but do not guarantee its applicability to the process of the user or assume any liability arising out of its use or performance. The user, by accepting the products described, agrees to be responsible for thoroughly testing any application to determine its suitability before committing to production. It is important for the user to determine the properties of its own commercial laminates when using this or any other reinforcement. *Because of numerous factors affecting the results, we make no warranty of any kind, expressed or implied, including those of merchantability and fitness for a particular purpose. Statements in this document shall not be construed as representations or warranties or as inducements to infringe any patent or violate any law, safety code, or insurance regulation.*

More Information

<http://www.neg.co.jp/inquiry/>

<http://www.neg.co.jp/en/inquiry/>

Mechanical Properties

Tensile Testing (ISO 527)

PA6/PA66/PA66 (after hydrolysis^a)

Tensile Strength (MPa) = 180/200/98

Tensile Modulus (GPa) = 9.9/10.2/4.9

Tensile Elongation (%) = 4.4/3.7/4.4

Charpy (ISO 179)

PA6/PA66/PA66 (after hydrolysis^a)

Charpy (unnotched) (kJ/m²) = 100/85/81

Glass Content by Weight (%) = 30

^a 10 days in boiling mixture (93/7) of long life coolant and water (135°C)

This data was obtained during tests at room temperature from injection molded test bars. Twin screw extrusion compounding with downstream addition of glass fibers was used to produce the molding granules. Values should be considered as guides only and may vary due to processing differences.

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