



Direct Roving Fiber Glass

HYBON[®] 2001



Product Description

HYBON 2001 roving from NEG is a continuous filament, single-end strand roving designed to reinforce polyester, vinyl ester and epoxy resin systems. *HYBON 2001* roving may be used in filament winding, pultrusion, weaving and non-woven fabric applications. It offers rapid wetout and saturation with low resin demand and can be processed free of catenary. *HYBON 2001* roving consists of multiple filaments of glass fiber honed with a multi-compatible sizing into a single, splice-free strand. Each package is in a wrap film with each pallet stretch wrapped to protect the fiber glass roving from dirt and moisture.

User Benefits

- Multi-compatible with polyester, vinyl ester and epoxy resins.
- Excellent unwinding performance and transfer from package to package.
- Single-end roving that catenary-free and abrasion resistant.
- Low resin demand during subsequent processing.
- Consistent tex control and surface sizing system.
- Rapid, complete and consistent wet out.
- Manufacturing facilities operate quality management systems that comply with ISO 9001:2015 requirements.
- Germanischer Lloyd (GL) certified.

Packaging

- 48 packages/pallet
- 20 kg (44 lbs.) /package



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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						
Roving Tex, nominal (g/km)	300	600	900	1200	2400	4800	9600
Roving Yield, nominal (yd/lb)	1650	827	550	413	207	103	52
Average Fiber Diameter (µm)	14	12	15	17	17	24	24
		15					
Other Tex/Yield options are available upon request. Contact your NEG Account Manager.							

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 Impregnated Strand Tensile Testing (ASTM D2343)

Tensile Strength (MPa/ksi) = 2290/332
Glass Content by Weight (%) = 61.5

Interlaminar Shear Strength (ASTM D2344)

Anhydride Cured Epoxy

Horizontal Shear Dry (MPa/ksi) = 75.8/11.0
Horizontal Shear Wet*(MPa/ksi) = 69.6/10.1
Strength Retention (%) = 91.8
Glass Content by Weight (%) = 62.4

Unsaturated Polyester

Horizontal Shear Dry (MPa/ksi) = 60.1/8.72
Horizontal Shear Wet*(MPa/ksi) = 51.7/7.51
Strength Retention (%) = 86.1
Glass Content by Weight (%) = 66.2

*6 Hour water boil conditioning

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