PRODUCT INFORMATION

agy
strength in materials

758 ZenTron® Roving

High-Strength Solutions for Your Toughest Reinforcement Challenges

AGY's ZenTron® fibers are designed to meet your most demanding performance processing and cost requirements. AGY's global network of people and facilities are ready to help you develop innovative solutions to your most difficult reinforcement challenges.

Product Application

758 ZenTron roving is designed to be used in recreation, marine, and aerospace applications such as:

- Archery bows
- Snowboards
- High performance marine applications
- Aerospace interiors

Product Solutions

ZenTron fibers offer a unique combination of properties: strength impact resistance, stiffness, radar transparency and temperature and fatigue resistance. Compared with other reinforcing materials, ZenTron fibers weigh less than conventional glass fiber and deliver better cost performance than aramid and carbon fibers.

Product Description

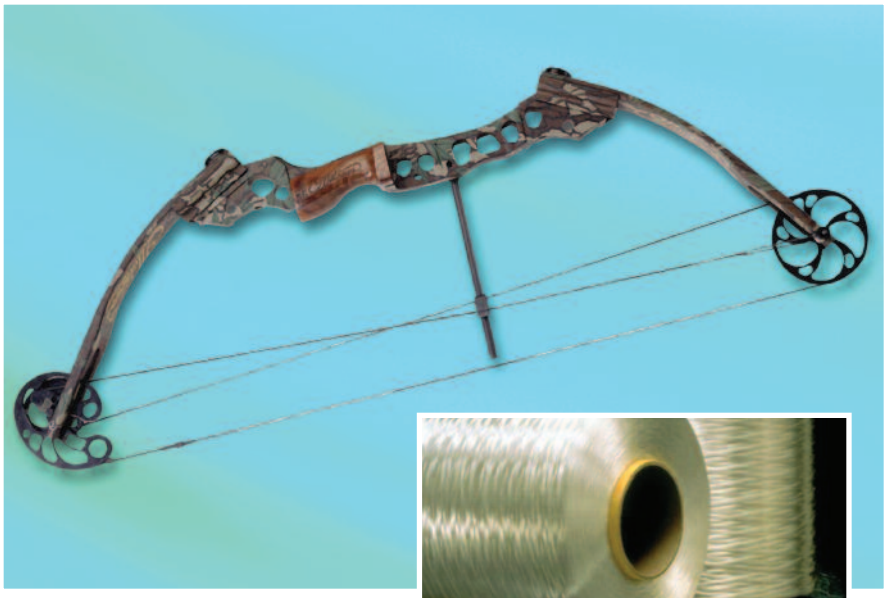
758 ZenTron roving consists of numerous L filament (14 micron) continuous glass strands, gathered without mechanical twist in a single bundle and treated with an epoxy-compatible sizing.

Resin Compatibility

- Epoxy (anhydride-cured)

Processes

- Weaving
- Filament winding
- Pultrusion
- Unidirectional pre-pregs



Archery Bow

ZenTron® Fiber

Features	Benefits
Efficient processing	ZenTron fiber has a catenary-free single end roving which can translate into more efficient processing for composites that are pultruded, filament wound or molded from fabrics and braids. This results in a more uniform fiber alignment than traditional multi-end rovings
Easier hybridization	The single-end construction makes it easier to hybridize with aramid and carbon tows
Quick wet-out	Designed to optimize wet-out in epoxy "kiss roll" and resin bath processes. Wets out at least 50% faster than conventional multi-end rovings
Low fuzz	Minimal fiber breakage can reduce fuzz during handling
Enhanced stiffness	Delivers 25% more linear-elastic stiffness than conventional glass fiber
Long shelf life, good machinability	Consistent performance and reliability and excellent durability

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Glass Composition
"S Glass" - reference
ASTM C 162-98, MIL-R-60346

Solids (% LOI*)
1.0 nominal
* Loss on ignition after drying

Additional References
Customer acceptance standard: RF-68

Typical Laminate Properties

80% by weight (60% by volume) uni-directional laminate (epoxy)

Tensile strength, ASTM D 3039	2070MPa (300ksi)
Tensile modulus, ASTM D 3039	9GPa (63msi)

Available Products

Nominal Linear Density

Nominal Filament	TEX	Yards/Pound	US	Microns
758-AB-675	735	675	"L"	14

Packaging

Package #	4044		4144	
Type Build	Tubeless		Tube	
Descriptions	Metric (cm)	English (in)	Metric (cm)	English (in)
Outside diameter	22.0	8.68	22.4	8.83
Inside diameter	16.2	6.38	16.2	6.38
Tube length	n/a	n/a	27.9	11.0
Traverse	26.0	10.25	26.0	10.25
Nominal package weight	7.25kg	16.0lbs	7.25kg	16.0lbs
Approximate net weight/pallet	430kg	945lbs	245kg	540lbs

Packaging Standards

Packaging	1	2
Carton	T110	T525
Bobbin	4044	4144
Carton Dimensions [cm (in)]	110x110x94 (43.3x43.3x37)	78.7x1143x96.5 (31x45x38)
Packages/carton	60	36
Cartons/pallet	1	1
Pallets/typical truckload	40	48
Pallet dimensions [cm (in)]	110x110x94 (43.3x43.3x37)	78.7x1143x96.5 (31x45x38)

Product Data

Silane treatment for epoxy compatibility

Available yield, bareglass TEX (yards/pounds)	Minimum	Nominal	Maximum
	676 (734)	735 (734)	794 (625)

Nominal strand solids	0.65%
Strand tensile strength, ASTM D 2343	3660MPa (530ksi)
Strand tensile modulus, ASTM D 2343	89MPa (13msi)
Short beam shear strength, ASTM D 2344	72MPa (10.5ksi)
Density, ASTM C 693 2.46-2.49 g/cm^3	(0.089-0.090 in/in^3)
Coefficient of thermal expansion, ASTM D 696	2.9 10^6 mm/mm/°C (63 106 in/in/°F)

S-2 Glass is a registered trademark of AGY.

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