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

### Features | Benefits
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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.
# PRODUCT INFORMATION

## Glass Composition

“S Glass” - reference  
ASTM C 162-98, MILR-60346

## Solids (% LOI*)

1.0 nominal  
* Loss on ignition after drying

## Additional References

Customer acceptance standard: RF-68

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### 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

<table>
<thead>
<tr>
<th>Nominal Filament</th>
<th>TEX</th>
<th>Yards/Pound US</th>
<th>Microns</th>
</tr>
</thead>
<tbody>
<tr>
<td>758-AB-675</td>
<td>735</td>
<td>675</td>
<td>“L”</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>14</td>
</tr>
</tbody>
</table>

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## Packaging

### Package #

<table>
<thead>
<tr>
<th>Package #</th>
<th>4044</th>
<th>4144</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type Build</td>
<td>Tubeless</td>
<td>Tube</td>
</tr>
<tr>
<td>Descriptions</td>
<td>Metric (cm)</td>
<td>English (in)</td>
</tr>
<tr>
<td>Outside diameter</td>
<td>22.0</td>
<td>8.68</td>
</tr>
<tr>
<td>Inside diameter</td>
<td>16.2</td>
<td>6.38</td>
</tr>
<tr>
<td>Tube length</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Traverse</td>
<td>26.0</td>
<td>10.25</td>
</tr>
<tr>
<td>Nominal package weight</td>
<td>7.25kg</td>
<td>16.0lbs</td>
</tr>
<tr>
<td>Approximate net weight/pallet</td>
<td>430kg</td>
<td>945lbs</td>
</tr>
</tbody>
</table>

### Packaging Standards

<table>
<thead>
<tr>
<th>Packaging</th>
<th>1</th>
<th>2</th>
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</thead>
<tbody>
<tr>
<td>Carton</td>
<td>T110</td>
<td>T525</td>
</tr>
<tr>
<td>Bobbin</td>
<td>4044</td>
<td>4144</td>
</tr>
</tbody>
</table>

| Carton Dimensions | 110x110x94 | 78.7x1143x96.5 |
| [cm (in)] | (43.3x43.3x37) | (31x45x38) |

| Packages/carton | 60 | 36 |
| Cartons/pallet | 1 | 1 |
| Pallets/typical truckload | 40 | 48 |

| Pallet dimensions | 110x110x94 | 78.7x1143x96.5 |
| [cm (in)] | (43.3x43.3x37) | (31x45x38) |

## Silane treatment for epoxy compatibility

- 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/cm³: (0.089-0.090 in/in²)
- Coefficient of thermal expansion, ASTM D 696: 2.9 10⁶ mm/mm/°C

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**World Headquarters/Americas**

2556 Wagener Road • Aiken, South Carolina, 29801 USA • Phone: +(1) 888.434.0945 (toll free) • +(1) 803.643.1501 • Fax: +(1) 803.643.1180  
Email: asktheexperts@agy.com

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**Europe**

Le Gemellyon Nord  
57 Boulevard Marius Vivier Merle  
69003 Lyon, France  
Phone: +(33) 4727 81775  
Fax: +(33) 4727 81780

**China**

Shanghai Huazheng Composites Co., Ltd  
Suite 1306-8, Bldg 1, No.1628 Jinshajiang Rd.  
Shanghai 200333 China  
Phone: +(86) 21 3251 3871  
Fax: +(86) 21 3251 2839

**Japan**

Sakai Sangyo Co., Ltd  
1348-1 Hosoijima, Shimada City  
Shizuoka Prefecture 427-8512  
Japan  
Phone: +(81) 547 35 2727  
Fax: +(81) 547 35 0015

**Korea**

Fine Commerce Inc.  
#506 Daesung Bld.  
17-16 Yuido-dong  
Youngdeungpo-Gu Seoul  
150-874 Korea  
Phone: +(82) 2769 1114  
Fax: +(82) 2769 1088

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