



**strength** in materials

# 762 S-2 Glass® Yarn

High-Strength Solutions for Your Toughest Reinforcement Challenges

AGY's S-2 Glass® high-strength fibers are specifically 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

762 S-2 Glass yarn is designed to be used for producing reinforcing cords for rubber belts and sheets in applications such as:

- Synchronous timing belts
- Manufactured rubber goods

### Product Solutions

S-2 Glass fibers offer a unique combination of properties: strength, impact resistance, stiffness, radar transparency and temperature and fatigue resistance. Compared with other reinforcing materials, S-2 Glass fibers weigh less than conventional glass fiber and deliver better cost performance than aramid and carbon fibers. In addition, these yarns meet the requirements of MIL-Y-1140H specifications.

### Product Description

762 S-2 Glass yarn consists of numerous E or G-filament (7 or 9 micron) continuous glass strands, untwisted and treated with a sizing compatible with various rubbers.

### Resin Compatibility

- Chloroprene
- Resourcing-Formaldehyde-Latex (RFL) Rubber

### Processes

- Cording
- Braiding



Automotive Timing Belt



S-2 Glass Fiber Yarn

Features	Benefits
S-2 Glass fiber offers significantly more strength than conventional glass fiber: 85% more tensile strength in resin impregnated strands	Longer life or narrower belt, saving space in engine compartments
Better fiber toughness, modulus of resilience and impact deformation than conventional glass fiber	Improved impact capabilities to finished parts and higher composites durability and damaged tolerance
Softening point: 1056°C (1932°F) Annealing point: 816°C (1500°F) Strain point: 766°C (1410°F)	Greater fiber tensile strength and stability at elevated temperatures in thermoset and thermoplastic applications
Enhanced stiffness	Delivers 25% more linear-elastic stiffness than conventional E-Glass or standard aramid fibers
Excellent tolerance to damage accumulation, high strain to failure, outstanding fatigue life	The ability of composite parts to withstand high levels of tension and flexural fatigue. Timing belt life in range 150,000-240,000km
Coefficient of thermal expansion about 70% lower than conventional E-Glass	Consistent performance and tension over a wide temperature range reducing dependence on complex and expensive auto-tensioning devices

## PRODUCT INFORMATION

### Available Products

Yarn Type (metric)	Construction	Nominal Twist	Sizing	Approximate Yarn Diameter		Nominal Bareglass Yield		Denier	Nominal Filament Diameter
				mm	inch	TEX	Yard/Pound		
SCE225 (SC7 22)	1/0	untwisted formed package	762	0.100	0.0039	22	22,500	198	"E" or 7 microns
SCG150 (SC9 33)	1/0	untwisted formed package	762	0.136	0.0054	33	15,000	297	"G" or 9 microns

#### Glass Composition

"S Glass" - reference AMS 3832A,  
ASTM C 162-90, ISO 2078

#### Solids (% LOI\*)

0.37 minimum  
0.42 nominal  
0.47 maximum  
\* Loss on ignition after drying

#### Additional References

Customer acceptance standard: TP-378

### Packaging

Package #	X-119	
Type Build	Formed Package	
Descriptions	Metric (cm)	English (in)
Inside diameter	15.2	6.0
Tube length	26.7	10.5
Traverse	25.4	10.0
Maximum full package diameter	20.3	8.0
Minimum package weight	1.81kg	4.0lbs
Maximum package weight	3.63kg	8.0lbs
Packages/pallet	36	
Approximate net weight/pallet	131kg	288lbs
Pallets/typical truckload	60	

S-2 Glass is a registered trademark of AGY.

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