

### Product Description

308S Direct Roving is produced with E6 glass formulation and coated with a silane-based sizing composition. It is specially designed for reinforcing epoxy resin and suitable for both amine and anhydride curing systems.

The composites of epoxy resin reinforced with 308S have excellent mechanical and anti-fatigue properties. 308S is suitable for high-tension winding and pultrusion processes. Typical applications include wound pipes, high pressure cylinders and pultruded profiles.



### Product Features

- Fast and complete wet-out and good bonding with resins
- Good process performance and low fuzz
- Suitable for high speed, high tension filament winding process
- Excellent mechanical properties and fatigue resistance
- Excellent acid corrosion resistance

### Specification

Glass type	E6		
Sizing type	Silane		
Typical filament diameter (um)	17	21	24
Typical linear density (tex)	600 / 900 2400 / 4800	2000	2400 4800
Example	E6DR17-2400-308S		

### Technical Parameters

Item	Linear density variation	Moisture content	Size content	Breakage strength
Unit	%	%	%	N/tex
Test method	ISO 1889	ISO 3344	ISO 1887	ISO 3341
Standard range	± 5	≤ 0.10	0.55 ± 0.15	≥ 0.40 (< 4800 tex) ≥ 0.35 (≥ 4800 tex)

### Mechanical Properties

Mechanical properties	Unit	Value	Resin	Test method
Tensile strength	MPa	2590	Amine/DER331	ASTM D2343
Tensile modulus	GPa	82.0	Amine/DER331	ASTM D2343
Shear strength	MPa	74.3	Amine/DER331	ASTM D2344
Strength retention(72 hr boiling)	%	> 96	Amine/DER331	/

The above data are actual experimental values for E6DR17-2400-308S and to be used for reference only.

### Instructions

- The product is best used within 12 months after production, and should be kept in the original package before use.
- Care should be taken when using the product to prevent it from being scratched or damaged.

### Instructions

- The temperature and humidity of the product should be conditioned to be close or equal to the ambient temperature and humidity before use, and the ambient temperature and humidity should be properly controlled during the use.
- When using the product, please control the tension properly and ensure the tension uniformity.

### Packaging

Item	unit	Standard			
Typical packaging method	/	Packed on pallets.			
Typical package height	mm (in)	260 (10.2)			
Package inner diameter	mm (in)	160 (6.3)			
Typical package outer diameter	mm (in)	280 (11.0)		310 (12.2)	
Typical package weight	kg (lb)	17 (37.5)		22 (48.5)	
Number of layers	(layer)	3	4	3	4
Number of packages per layer	(pcs)	16		12	
Number of packages per pallet	(pcs)	48	64	36	48
Net weight per pallet	kg (lb)	816 (1799.0)	1088 (2398.6)	792 (1746.1)	1056 (2328.1)
Pallet length	mm (in)	1140 (44.9)		1270 (50.0)	
Pallet width	mm (in)	1140 (44.9)		960 (37.8)	
Pallet height	mm (in)	940 (37.0)	1200 (47.2)	940 (37.0)	1200 (47.2)

### Storage

Unless otherwise specified, the fiberglass products should be stored in a dry, cool and moisture proof area. The best temperature and humidity should be maintained at  $-10^{\circ}\text{C}$   $\sim 35^{\circ}\text{C}$  and  $\leq 80\%$  respectively. To ensure safety and avoid damage to the product, the pallets should be stacked not more than three layers high. When the pallets are stacked in two or three layers, special care should be taken to correctly and smoothly move the upper pallet.

