

396 Direct Roving, based on E6 glass formulation, is coated with a silane-based sizing and compatible with polyester, vinyl ester, epoxy, and polyurethane resin systems. It is designed for weaving, stitching, filament winding, and pultrusion processes. 396 has excellent resin compatibility. It is suitable for prepreg and vacuum-assisted resin infusion processes to manufacture large wind blades, and also for pultrusion and filament winding processes to manufacture utility poles and container doors.



Product Features

- ⦿ High process flexibility
- ⦿ Good end use performance
- ⦿ Compatibility with multiple resin systems with fast and complete wet out.
- ⦿ Good abrasion resistance and smooth package-to-package transfer under high tension
- ⦿ Excellent mechanical properties
- ⦿ Excellent acid corrosion resistance

Identification

Glass Type	E6			
Type of Size	Silane			
Size Code	396			
Linear Density (tex)	300	600	1200	2400
Filament Diameter (μm)	13	17	17	17

Technical Parameters

Linear Density (%)	Moisture Content (%)	Size Content (%)	Breakage Strength (N/Tex)
ISO1889	ISO3344	ISO1887	ISO3341
±5	≤ 0.10	0.48 ± 0.10	≥ 0.40

Mechanical Properties

Mechanical Properties	Unit	Value	Resin	Method
Tensile Strength	MPa	2471	epoxy	ASTM D2343
Tensile Modulus	MPa	81324	epoxy	ASTM D2343
Shear strength	MPa	67	epoxy	ASTM D2344
Shear strength retention (72 hr boiling)	%	96	epoxy	—

The above data are actual experimental values for E6DR17-600-396 and for reference only.

Storage

Unless otherwise specified, the fiberglass products should be stored in a dry, cool and moisture-proof area. The room temperature and humidity should be always maintained at 15°C~35°C and 35% ~ 65%. It is best if the product is used within 12 months after production date. The fiberglass products should remain in their original packaging until just prior to user.

To ensure safety and avoid damage to the product, the pallets should not be stacked more than three layers high. When the pallets are stacked in 2 or 3 layers, special care should be taken to correctly and smoothly move the top pallet.

Packaging

* The product can be packed on pallet or in small cardboard boxes.

Package height mm (in)	260 (10)	260 (10)
Package inside diameter mm (in)	160 (6.3)	160 (6.3)
Package outside diameter mm (in)	275 (10.6)	310 (12.2)
Package weight kg (lb)	15.6 (34.4)	22 (48.5)

Number of layers	3	4	3	4
Number of doffs per layer	16		12	
Number of doffs per pallet	48	64	36	48
Net weight per pallet kg (lb)	750 (1653.4)	1000 (2204.6)	792 (1746)	1056 (2328)

Pallet length mm (in)	1120 (44)		1270 (50)	
Pallet width mm (in)	1120 (44)		960 (37.8)	
Pallet height mm (in)	940 (37)	1180 (46.5)	940 (37)	1180 (46.5)

