

318 Direct Roving is coated with a silane-based sizing compatible with epoxy resins and designed for filament winding, pultrusion, and weaving applications.

318 is suitable for use in high pressure pipes, storage tanks, and rods, and its fabrics are used to manufacture wind blades.

Product Features

- ◎ Good process performance
- ◎ Complete and fast wet-out
- ◎ Low unwinding tension and low fuzz
- ◎ Good mechanical properties

Identification

Glass Type	E					
Type of Size	Silane					
Size Code	318					
Linear Density (tex)	300	600	900	1103	1985	2400
	735			1200	2100	4800
Filament Diameter (mm)	14	17	15	17	21	24



Technical Parameters

Linear Density (%)	Moisture Content (%)	Size Content (%)	Breakage Strength (N/tex)
ISO 1889	ISO 3344	ISO 1887	ISO 3341
±5	≤ 0.10	0.55 ± 0.15	≥ 0.40

Mechanical Properties

Mechanical Properties	Unit	Value	Resin	Method
Tensile Strength	MPa	2454	EP	ASTM D2343
Tensile Modulus	MPa	80595	EP	ASTM D2343
Shear strength	MPa	69	EP	ASTM D2344
Shear strength retention (72 hr boiling)	%	93	EP	—

The above data are actual experimental values for EDR14-2400-318 using an amine curing system 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)	270 (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)

