

## 2293 24K Carbon Tow



**Overview:**

Selectively Reinforce Fiberglass, Kevlar® and Carbon. Our High strength Carbon Tow is for selectively reinforcing fiberglass or carbon and for fabricating small, high strength, low weight structures. Use to filament wind tubes or add as a dense charge for compression molding.

Available in 50, 100 and 250 yard rolls.

**Specific Product Properties:**

Typical Fiber Properties (Lot Average)		Inch-Pound	SI
Tensile Strength		650 x 10 <sup>3</sup> psi	4482 MPa
Tensile Modulus		34 x 10 <sup>6</sup> psi	235 GPa
Elongation		1.9%	1.9%
Density		0.066 lb/in <sup>3</sup>	1.84 g/cm <sup>3</sup>
Linear density without sizing		F22	1550 tex 1.55
Yield without sizing	F22	320 yd/lb	645 m/kg
Sizing level w/w	F22	1.0%	1.0%

**Yarn/Tow Characteristics:**

Filament Diameter	7 x 10 <sup>-6</sup> m. Nominal
Twist	Never Twisted
Equivalent Yarn Cross Section	13.35 x 10 <sup>-4</sup> in <sup>2</sup> (0.86 mm <sup>2</sup> ) Nominal

**Storage:**

2293 24K Carbon Tow should be stored indoors. The recommended storage conditions are 40° F - 77°F (5-25°C) and less than 50 percent RH. Direct exposure to sunlight or rain should be avoided. If the roving is stored at high temperatures and/or high humidity conditions, it may become difficult to process. Roving that stiffens during storage should still be useable. However, a thorough evaluation of the processing characteristics (e.g. resin wet out, spreadability) relative to the customer's operation is strongly recommended.

**Safety & Handling:**

#571 1/4" Chopped Graphite Fibers contain ingredients which could be harmful if mishandled. Contact with skin and eyes should be avoided and necessary protective equipment and clothing should be worn. Individuals should wash with soap and water before eating, drinking, or using toilet facilities. Individuals should observe conditions of good industrial hygiene and safe working practice. For more detailed instructions on handling please see the MSDS sheet.

**Resin Compatibility:**

Part Number	Polyester Resin	Vinyl Ester Resin	System 2000 Epoxy
2293	x	x	x

A "P" is for the primary resin for the fabric.  
An "X" means the fabric is compatible with the resin.  
The compatibility is based on Fibre Glast Development's resins only.