

CBF Roving

Technical Data Sheet

Product description:

CBF roving is a complex thread of straight-directed CBF monofilaments, wound on a special spool for external unwinding.

Storage and usage conditions:

UBT recommends storage in a cool and dry warehouse into the original packaging. For an optimal processing we recommend to use the product in ambient conditions (20 - 23 °C, 55 - 65% Relative Humidity).

Linear density (TEX) Single-End Direct roving available:

22 TEX $- \varnothing$ 5-7 µm diameter of CBF monofilament. 32 TEX $- \varnothing$ 7-9 µm diameter of CBF monofilament. Tex range of 33 - 150 Tex and bigger might be produced on customer's request.

Sizing:

Engineered for high-end structural or high thermal resistance applications and compliant to different organic or ceramic matrix.

Moisture content, % weight: less than 0,4 %

Resin (matrix) compatibility: epoxy, polyester, vinyl ester, PA, PP, PEEK, BMI, ...etc.

Physical and Mechanical properties:

Volume density (ASTM C693): 2,57 gr/cm³

Sized and dried roving, according to ISO 3341:2000 (depending on the sizing formulation):

Breaking force in relation of fineness: 60-90 cN/Tex
Breaking stress: 1700-2050 MPa
Elongation at break, yarn/fibers: 1,67/2.44 %
E-modulus: 70-100 GPa

Thermal properties (according to DIN ISO 7884):

Melting point: 1550 °C Softening point: 950 °C

Operating long-term thermal range: from -260°C up to 850°C

Packing Statistics

External Payout Spool Height: 250-320mm External Payout Spool Inner Diameter: 76-80 mm

Wrapping: Thermo Retractable Film