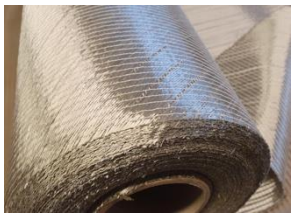
TECHNICAL DATASHEET

Substrates – Non-Crimp Biaxial

TENRON®

Product description

Non-crimp biaxial is made of multiple layers of unidirectional and stitch-bonded TENRON fibres.



Article reference

NCF (NON-CRIMP FABRIC), EX.: **NCF BX BSB3_210.±45.100.1,27.IS65T**

- Batch composition's reference
- Specific surface weight (gr/m²)
- Construction Pattern (fibres orientation)
- Length of roll (m)
- Width of roll (m)
- Sizing reference(*)

Thermal properties (according to DIN ISO 7884)

Melting point
1.560 °C

Transition temperature
730 °C

Softening point
940 °C

Mechanical properties

Impregnated strand (according to ASTM D2343 or ISO 9163:2005:)

- Tensile strength: 3.400 ... 3.600 MPa
- Tensile modulus (Young or E-modulus): 86 ... 97 GPa

Operating thermal range (continuous)

from -200°C up to 850°C

Physical properties

Volume density of constituent fibres (according to ASTM C693)
2.600 gr/cm³

Specific surface weight
From 200 up to 1.200 gr/m²

Constituent filament diameter
9 to 11 µm

Coefficient of variation
2,5%

Thickness
From 0,4 up to 3,0 mm

Standard Construction
±45°; 0°-90°

Sizing

Content, % weight (loss of ignition, LOI)
0,4 – 1,5 % (according to sizing and customer's request)

Moisture content, % weight
Less than 0,1 %

Resin (matrix) compatibility

Ceramic matrix materials, epoxy, polyester, vinylester, PA, PP, PEEK, BMI, etc..

(*) *see Isomatex Sales department for more information*

Standard Packaging

The rolls are individually labeled and wrapped with stretched plastic film for protection and improved handling.

Standard width (m)

1,27 m

Length (m)

From 100 to 500 m

Weight (kg)

Depending on length and surface weight

Inner diameter of cardboard sleeve (cm)

15 cm (by default)

Benefits of TENRON in end-applications

Please see our website, under “applications”.

Storage and usage conditions

ISOMATEX S.A. 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, 60 - 65% relative humidity). TENRON roving need to be kept in the workshop at least 24 hours prior to usage.

Sustainability

- ISOMATEX S.A. respects the environmental directives of the **European Union** and is **REACH compliant** (Regulation, Evaluation, Authorisation and Restriction of Chemicals) .
- TENRON is fully and easily recyclable. For more information on **sustainability** and our **LCA**, please see our website and / or contact us.

For more detailed information, please contact the Isomatex Sales Department at **info@isomatex.com** or by phone at the following number: **+32 (0)81.72.86.86**

DISCLAIMER OF LIABILITY

The data presented above is provided solely as a guide in the selection of fibre reinforcement. The information mentioned in this leaflet is based on actual ISOMATEX laboratory data and field test experience. Due to numerous factors in downstream processability that may affect results, we consider this information reliable but do not guarantee its applicability to the user's process or assume any liability arising from its use or performance. The end-user, by accepting the products described herein, assumes the responsibility for thoroughly testing any application to determine its compliance before committing to production. It is important for the end-user to determine the properties of their own commercial compounds when using this or any other fibre reinforcement.

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Scientific Park CREALYS
Rue Camille Hubert 29
5032 Gembloux, Belgium

+32(0)81.72.86.86
info@isomatex.com
www.isomatex.com

VAT : BE 0429 395 145 | RPM Namur : 0429 395 145