# Felts - Needle-punched

# TENRON®

## **Product description**

Needle-punched felts made of TENRON cut (staple) fibres.



#### **Article reference**

NP-NW (Needle-punched nonwovens), EX.:	NP-NW BSB3	_200(11).120.127.IS65	T
Batch composition's reference			
- Specific surface weight (g/m²)			
– Diameter of virgin (elementary) fibers (μm.)			
- Length of roll (m)			
- Width of roll (cm)			
- Sizing reference of constituent filaments (*)			

# **Physical properties**

Volume density of constituent fibres (according to ASTM C693)

2.600 g/cm<sup>3</sup>

Specific surface weight

From 200 up to 1.600 g/ $m^2$ 

Constituent filament diameter

11 µm.

**Coefficient of variation** 

2,5%

Thickness of felts

From 2,3 up to 25,4 mm

**Cut fibres length** 

From 20 up to 100mm

# Thermal properties (according to DIN ISO 7884)

**Melting point** 

1.560 °C

**Transition temperature** 

730 °C

**Softening point** 

940 °C

# Operating thermal range (continuous)

From -200°C up to 1000°C

# Thermal conductivity ( $\lambda$ ) (according to ISO 10635)

Temperature (°C)	100	200	300	400	500	600	700	800	900	1.000
Thermal Conductivity (W.m-1.K-1)	0,060	0,065	0,080	0,100	0,135	0,175	0,225	0,285	0,355	0,435

# Sizing

Content, % weight (loss of ignition, LOI)

0,4 - 1,5 % (according to customer's request)

Moisture content, % weight

Less than 0.1 %

Resin (matrix) compatibility

Epoxy, polyester, vinylester, PA, PP, PEEK, BMI, etc.

## Standard Packaging

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

Width (m)

1,27m

Length (m)

Up to 120m/ mat

Weight (kg)

Full package is from 10 to 210kg/roll

Inner diameter of cardboard sleeve (mm)

150,0mm (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** 

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Strong by Nature

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