

# Felts – Needle-punched

## Product description

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



## Article reference

**NP-NW (Needle-punched nonwovens), EX.:** **NP-NW BSB3\_200(11).0120.1270.IS65T**

- Batch composition's reference \_\_\_\_\_
- Specific surface weight (g/m<sup>2</sup>) \_\_\_\_\_
- Diameter of virgin (elementary) fibers (µm.) \_\_\_\_\_
- Length of roll (m) \_\_\_\_\_
- Width of roll (cm) \_\_\_\_\_
- Sizing reference of constituent filaments (\*) \_\_\_\_\_

## 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<sup>2</sup>

**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 (λ) (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.

(\*) see TENRON Sales department for more information

## Standard Packaging

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

### Width (cm)

127 cm

### Length (m)

Up to 120m/ mat

### Weight (kg)

Full package is from 10 to 210 kg/ roll

### Inner diameter of cardboard sleeve

150,0 mm (by default)



## Benefits of Tenron in end-applications

Please see our website, under "applications".

## Storage and usage conditions

TENRON 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

-  TENRON 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 Tenron Sales Department at [info@tenron.com](mailto:info@tenron.com) or by phone at the following number: **+32 (0)81.72.86.86**

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