

## TS - Separation & Filtration Nonwovens

TenCate Polyfelt TS geotextiles are mechanically bonded continuous filament nonwovens made from 100% UV stabilized polypropylene. They have been used for decades as separation and filtration elements in a large number of civil engineering applications.



TenCate Polyfelt TS

### TS- geotextiles stabilise base courses over subgrades with low bearing capacity

TS- geotextiles ensure the uniform thickness of the base course by preventing the ingress of fill material into the fine-grained subgrade. Installation damage is prevented by the outstanding puncture resistance. The high tensile strength of TS in longitudinal, transverse and diagonal direction provides additional stability to the structure.

### TS- geotextiles maintain the permanent function of drainage systems

TS- geotextiles offer excellent filtration properties, characterized by high water permeability and optimum soil-retention capability, even under high mechanic and hydraulic stress. This ensures that the drainage gravel keeps its water flow capacity, thus providing quick and efficient drainage of the soil.

### TS- geotextiles are robust and long-lasting

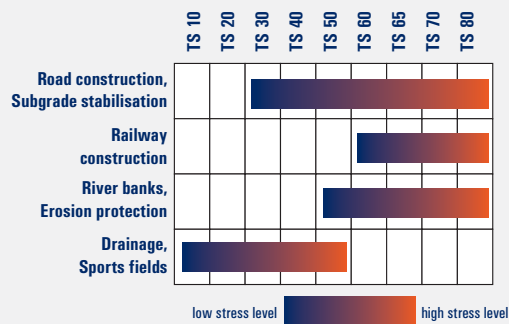
The manufacturing method (a continuous process with endless filaments) guarantees the use of high-quality raw materials. TS is resistant to all chemical and biological media usually occurring in soils and construction materials. It cannot be dissolved by water and therefore is harmless to ground water. TS- geotextiles are equipped with a UV-stabilizer, providing extended resistance to direct sunlight.

### Service is a part of quality

Thanks to a worldwide network of subsidiaries and trading partners TS- geotextiles are quickly available. Standard grades can be delivered promptly. For technical questions an experienced team of experts is at your service.

### TS- geotextile grade selection

The grade selection chart below gives just a rough guidance. For a detailed design please contact our technical staff, or use our special design software. Obtain your free copy of the TenCate design CD by emailing the relevant sales office overleaf, or use our special design software on our homepage [www.tencate.com/geosynthetics](http://www.tencate.com/geosynthetics).



### The advantages at a glance:

- Stabilizes base courses over low bearing capacity subgrades
- Maintains the function of drainage systems
- High long-term resistance and robustness
- Technical support by TenCate Service Team

### Applications



## TS - Separation & Filtration Nonwovens - Technical Data

Properties [Standard]	Unit	TS 10 (4.01)	TS 20 (4.01)	TS 30 (4.01)	TS 40	TS 50	TS 60	TS 65	TS 70	TS 80	
<b>Mechanical Properties</b>											
Tensile strength [EN ISO 10319]	MD	kN/m	8	10	12	14	16	20	22	25	29
	CD	kN/m	8	10	12	14	16	20	22	25	30
Elongation at max. load [EN ISO 10319]	MD	%	90	90	90	100	100	100	100	100	100
	CD	%	75	75	75	40	40	40	40	40	40
Energy value [EN ISO 10319]	(MD + CD)/2	J/mm <sup>2</sup>	48	58	71	75	84	110	120	134	156
Static puncture resistance (CBR-Test) [EN ISO 12236]		N	1240	1500	1800	2100	2350	3050	3350	3850	4400
Cone drop test (hole-Ø) [EN ISO 13433]		mm	26	24	20	24	22	19	17	15	13
<b>Hydraulic Properties</b>											
Permeability vertical [EN ISO 11058] (Δh = 50 mm)		l/m <sup>2</sup> s (mm/s)	130	115	100	100	90	80	70	60	55
Opening size O <sub>90</sub> [EN ISO 12956]		µm	120	105	100	100	100	95	95	90	90
<b>Identification Properties</b>											
Thickness [EN ISO 9863-1]	2 kPa	mm	0.8	0.9	1.2	1.8	1.9	2.4	2.5	2.9	3.3
Mass per unit area [EN ISO 9864]		g/m <sup>2</sup>	105	125	155	180	200	260	285	325	385
<b>Forms of Supply</b>											
Width		m	2 / 4	2 / 4	2 / 4	2 / 4	2 / 4	2 / 4	2 / 4	2 / 4	2 / 4
Length		m	300	250	225	200	175	135	125	100	90

The values given are average values obtained in our laboratories and in testing institutes. The right is reserved to make changes without notice at any time.

### TENCATE GEOSYNTHETICS AUSTRIA GMBH

Schachermayerstr. 18  
A-4021 Linz, Austria

Tel. +43 732 6983 0, Fax +43 732 6983 5353  
service.at@tencate.com, www.tencategeosynthetics.com

**BeNeLux**  
**Central Eastern Europe**  
**Czech Republic**  
**France / Africa**  
**Germany**  
**Italy**  
**Near Middle East**

Tel. +31 546 544 811  
Tel. +43 732 6983 0  
Tel. +420 2 2425 1843  
Tel. +33 1 34 23 53 63  
Tel. +49 6074 3751 50  
Tel. +39 0362 34 58 11  
Tel. +971 5048 10557

service.nl@tencate.com  
service.at@tencate.com  
service.cz@tencate.com  
service.fr@tencate.com  
service.de@tencate.com  
service.it@tencate.com  
service.nme@tencate.com

**Poland / CIS**  
**Romania**  
**Scandinavia / Baltics**  
**Spain / Portugal**  
**Switzerland**  
**UK / Ireland**

Tel. +48 12 268 8375  
Tel. +40 21 322 06 08  
Tel. +45 4485 7474  
Tel. +34 34 916 506 318  
Tel. +41 44 318 6590  
Tel. +44 1952 588 066

service.pl@tencate.com  
service.ro@tencate.com  
service.dk@tencate.com  
service.es@tencate.com  
service.ch@tencate.com  
service.uk@tencate.com



502 644 | 04.2010

Protective Fabrics  
Space Composites  
Aerospace Composites  
Advanced Armour

Geosynthetics  
Industrial Fabrics  
Grass