

## Declaration of Performance

No.: TS400/S 2016-03-22

1. **Unique identification code of product-type:** TenCate Polyfelt TS400/S

2. **Product Type:** TS400/S

3. **Intended use:**

EN 13249:2005 Roads

EN 13254:2005 Reservoirs and dams

EN 13250:2005 Railways

EN 13255:2005 Canals

EN 13251:2005 Foundations and walls

EN 13256:2005 Tunnels and underground structures

EN 13252:2005 Drainage systems

EN 13257:2005 Solid waste disposals

EN 13253:2005 Erosion control

EN 13265:2005 Liquid waste disposals

**Functions:** Filtration | Separation

4. **Contact address:**

TenCate Geosynthetics Austria GesmbH  
Schachermayerstraße 18, 4021 Linz, Austria  
Tel.: +43 70 6983 5353; e-mail: service.at@tencate.com

5. **System or systems of assessment:** System 2+

6. **In case of the declaration of performance (DoP) concerning a construction product covered by a harmonized standard:**

Notified Body No. 0799 Kiwa MPA Bautest GmbH, Niederlassung TBU 48268 Greven, performed the initial inspection of the manufacturing plant and of factory production control and the continuous surveillance, assessment and evaluation of factory production control under system 2+

7. **Declared performance:**

Essential characteristics		Performance		Test standard *)
		Mean value	Tolerance	
Tensile strength (MD / CMD)	[kN/m]	26 / 26	-3 / -3	EN ISO 10319
Elongation (MD / CMD)	[%]	90 / 50	+40 / -28,4 / +36 / -27,6	EN ISO 10319
In-plane flow capacity (20 kPa, i=1; foam/foam)	[l/ms]	6,2E-3	-1,2E-3	EN ISO 12958
CBR puncture strength	[N]	4250	-450	EN ISO 12236
Cone drop test (hole diameter)	[mm]	13	+2	EN ISO 13433
Opening size (O90)	[µm]	100	+/-20	EN ISO 12956
Water permeability normal to the plane	[l/m²s]	65	-13	EN ISO 11058
<b>Durability:</b> To be covered within 1 month after installation Has passed the following tests: Resistance to weathering EN 12224 acc. Tab. B.1 Predicted to be durable of 120 years (temp. 15°C): Resistance to oxidation EN ISO 13438; BAM Vh. 6127 Predicted to be durable more than 25 years in natural soils with pH < 4 and pH > 9 and soil temperatures > 25°C Has passed the following tests: Resistance to liquids EN 14030; method A and B Has passed the following tests: Microbiological resistance EN 12225				Annex B of harmonised technical specification

\*) corresponding to harmonized technical specifications of application standards mentioned under item 3.

Dangerous substances: less than the requirements specified in national regulations in force in the EU Member States

8. **Declaration:**

The performance of the product identified in points 1 and 2 is in conformity with the declared performance in point 7. This declaration of performance is issued under the sole responsibility of the manufacturer identified in point 4.

Signed for and on behalf of the manufacturer by:

A. Puchner (Quality Manager)

(name and function)

Linz, 2016-03-22

(place and date of issue)



(signature)

## Declaration of Performance

No.: TS820/R 2016-03-22

1. **Unique identification code of product-type:** TenCate Polyfelt TS820/R

2. **Product Type:** TS820/R

3. **Intended use:**

EN 13249:2005 Roads	EN 13254:2005 Reservoirs and dams
EN 13250:2005 Railways	EN 13255:2005 Canals
EN 13251:2005 Foundations and walls	EN 13256:2005 Tunnels and underground structures
EN 13252:2005 Drainage systems	EN 13257:2005 Solid waste disposals
EN 13253:2005 Erosion control	EN 13265:2005 Liquid waste disposals

**Functions:** Filtration | Separation

4. **Contact address:**

TenCate Geosynthetics Austria GesmbH  
 Schachermayerstraße 18, 4021 Linz, Austria  
 Tel.: +43 70 6983 5353; e-mail: service.at@tencate.com

5. **System or systems of assessment:** System 2+

6. **In case of the declaration of performance (DoP) concerning a construction product covered by a harmonized standard:**

Notified Body No. 0799 Kiwa MPA Bautest GmbH, Niederlassung TBU 48268 Greven, performed the initial inspection of the manufacturing plant and of factory production control and the continuous surveillance, assessment and evaluation of factory production control under system 2+

7. **Declared performance:**

Essential characteristics		Performance		Test standard *)
		Mean value	Tolerance	
Tensile strength (MD / CMD)	[kN/m]	10,5 / 10,5	-1,5 / -1,5	EN ISO 10319
Elongation (MD / CMD)	[%]	100 / 40	+/-30 / +20 / -12	EN ISO 10319
In-plane flow capacity (20 kPa, i=1; foam/foam)	[l/ms]	1,5E-3	-5,0E-4	EN ISO 12958
CBR puncture strength	[N]	1600	-100	EN ISO 12236
Cone drop test (hole diameter)	[mm]	27	+3	EN ISO 13433
Opening size (O90)	[µm]	140	+/-20	EN ISO 12956
Water permeability normal to the plane	[l/m²s]	150	-29	EN ISO 11058
<b>Durability:</b> To be covered within 1 month after installation Has passed the following tests: Resistance to weathering EN 12224 acc. Tab. B.1 Predicted to be durable of 120 years (temp. 15°C): Resistance to oxidation EN ISO 13438; BAM Vh. 6127 Predicted to be durable more than 25 years in natural soils with pH < 4 and pH > 9 and soil temperatures > 25°C Has passed the following tests: Resistance to liquids EN 14030; method A and B Has passed the following tests: Microbiological resistance EN 12225				Annex B of harmonised technical specification

\*) corresponding to harmonized technical specifications of application standards mentioned under item 3.

Dangerous substances: less than the requirements specified in national regulations in force in the EU Member States

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Signed for and on behalf of the manufacturer by:

A. Puchner (Quality Manager)

(name and function)

Linz, 2016-03-22

(place and date of issue)



(signature)

## Declaration of Performance

No.: TS820/R 2016-03-22

1. **Unique identification code of product-type:** TenCate Polyfelt TS820/R

2. **Product Type:** TS820/R

3. **Intended use:**

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EN 13250:2005 Railways	EN 13255:2005 Canals
EN 13251:2005 Foundations and walls	EN 13256:2005 Tunnels and underground structures
EN 13252:2005 Drainage systems	EN 13257:2005 Solid waste disposals
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**Functions:** Filtration | Separation

4. **Contact address:**

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 Tel.: +43 70 6983 5353; e-mail: service.at@tencate.com

5. **System or systems of assessment:** System 2+

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Notified Body No. 0799 Kiwa MPA Bautest GmbH, Niederlassung TBU 48268 Greven, performed the initial inspection of the manufacturing plant and of factory production control and the continuous surveillance, assessment and evaluation of factory production control under system 2+

7. **Declared performance:**

Essential characteristics		Performance		Test standard *)
		Mean value	Tolerance	
Tensile strength (MD / CMD)	[kN/m]	10,5 / 10,5	-1,5 / -1,5	EN ISO 10319
Elongation (MD / CMD)	[%]	100 / 40	+/-30 / +20 / -12	EN ISO 10319
In-plane flow capacity (20 kPa, i=1; foam/foam)	[l/ms]	1,5E-3	-5,0E-4	EN ISO 12958
CBR puncture strength	[N]	1600	-100	EN ISO 12236
Cone drop test (hole diameter)	[mm]	27	+3	EN ISO 13433
Opening size (O90)	[µm]	140	+/-20	EN ISO 12956
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Signed for and on behalf of the manufacturer by:

A. Puchner (Quality Manager)

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Linz, 2016-03-22

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