

NorGeoSpec 2012 Product Certificate



Certificate no.: NGS-50001
Date: 31.01.2016
Valid until: 30.01.2018

Manufacturer: TenCate Geosynthetics
Product: GEOLON PET 100/50
Product Type: GTX-W

Raw material: PET
Function: Reinforcement
(Main function)
Separation and Filtration
(Additional functions)

Quality Product Certification Reinforcement

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Characteristic	Standard	Unit	Declared value	Max. tolerance	Certification value	
Mass per unit	EN ISO 9864	g/m ²	230	± 23	207 - 253	
Dimension	NorGeoSpec 2012					
Grid openings production width			n/a			
Grid apertures	MD	mm	n/a			
	CMD	mm	n/a			
Mechanical tests						
Tensile strength	MD	EN ISO 10319	kN/m	100.00	0.00	100.00
	CMD	EN ISO 10319	KN/m	n/a	-	-
Strain at nominal strength	MD	EN ISO 10319	%	9.0	-1.8/+1.0	7.2 - 10.0
	CMD	EN ISO 10319	%	n/a	-	-
Strength at 2% elongation	MD	EN ISO 10319	kN/m	20.00	0.00	20.00
	CMD	EN ISO 10319	kN/m	n/a	-	
Strength at 5% elongation	MD	EN ISO 10319	kN/m	50.00	0.00	50.00
	CMD	EN ISO 10319	kN/m	n/a	-	
Strength at 10% elongation	MD	EN ISO 10319	kN/m	-	-	-
	CMD	EN ISO 10319	kN/m	-	-	-
Static puncture test	EN ISO 12236	kN	5.000	- 0.500	4.500	
Dynamic perforation resistance	EN ISO 13433		12	+ 3	15	
Hydraulic tests						
Velocity index	EN ISO 11058	m/s	0.005	- 0.002	0.003	
Characteristic opening size	EN ISO 12956	µm	75	± 22.5	53 - 98	
Durability (Declared value)	Service live	years	<input type="checkbox"/> 25	<input type="checkbox"/> 50	<input type="checkbox"/> 100	

Information about reduction factors are given on page 2 of this certificate.

Issued by

Christian Recker, NorGeoSpec project manager

Approved by

Arnstein Watn, Head of the Technical committee



The products are regularly audited and tested to verify that the characteristics fulfil the NorGeoSpec requirements.
Approved by the NorGeoSpec Technical committee: 31.01.2016

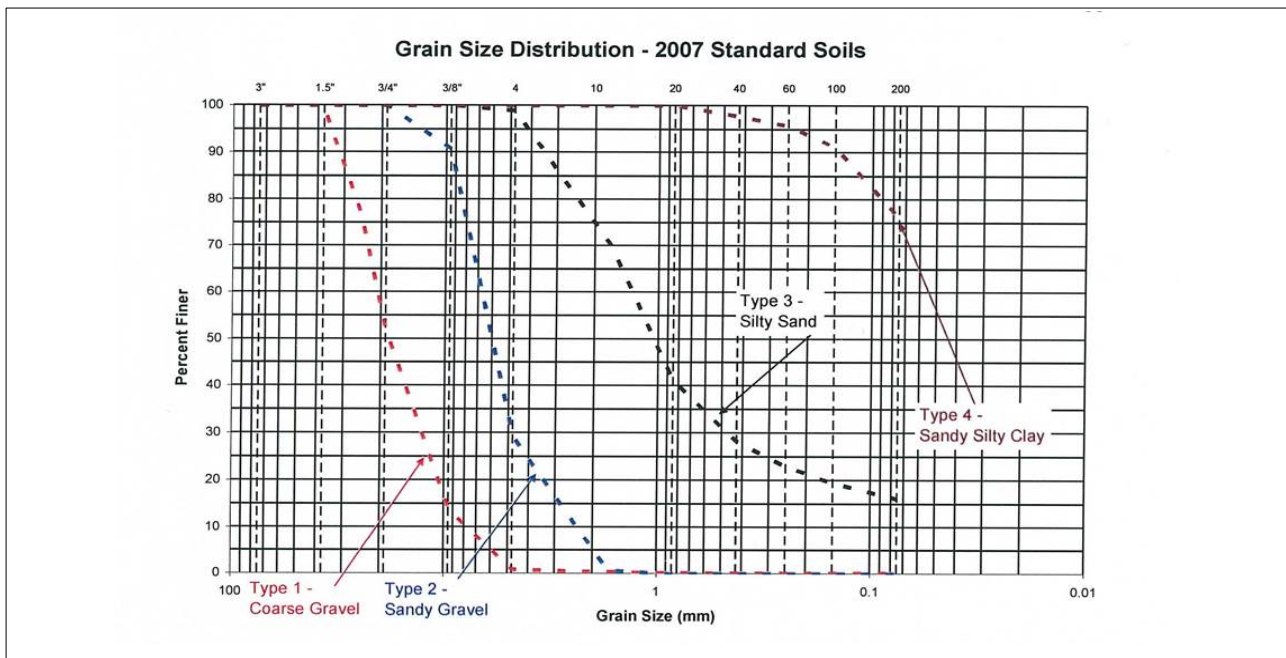
Declared values Reinforcement

Declared values					
Reduction factor for creep rupture ^{1) 2)}	RF _{CR}	1.43	Remarks: KIWA test report No.: 1.6/22320/0026.1.5-2005e (Edition 27.03.2014)		
Reduction factor for enviromenatl effects	RF _{CH}		Remarks:		
Chemical		-	Application in natural soils at a pH-value between 4 and 9 and a soil temperature of <25°C		
Oxidation		-	n.r.		
Hydrolysis		1.04	Reduction factor for a service life of 100 years (pH 4.0 to 9.0) at 20°C, SKZ test report 89363/09-III		
Reduction factor for weathering	RF _W	-	Remarks:		
Or max. exposure time					
1 month					
2 weeks					
1 day		X			
Reduction factor for installing damage	RF _{ID, fine}	-	RF _{ID, medium}	-	RF _{ID, coarse} 2.37
Used test method	The procedure for Installation Damage Test implemented in the testing satisfy the BS8006 Annex D (2010), Test report TRI April 2014,				

Compaction:

Ride-on steel-wheeled roller (10355 kg) + vibratory capability, 4 passes, 1st soil layer 17.5 cm – geosynthetic - 2nd soil layer 17.5 cm; compaction ~90 % modified proctor

Particle size distribution:



¹⁾producte range
²⁾ not required if used as base course layers
 n.r. = not required
 n/a = not applicable