

# NorGeoSpec 2002 Product Certificate



## Product Certificate

www.norgeospec.org  
No 0809-QC-1216  
Tiptex BS NGS 4  
NorGeoSpec 2002

Date:	2008-09-26
Valid until:	2010-09-26
Manufacturer:	Geo Tiptex Kft
Product:	Tiptex BS NGS 4
Applicable to specification profile:	4
Certificate	No 0809-QC-1216
Certification procedure:	QC
Required level of delivery control: 1 identification test for every 50000 m <sup>2</sup> , but minimum 1 id.test for deliveries over 10 000 m <sup>2</sup>	

Characteristic		Maximum tolerance (units)	Declared tolerance <sup>1</sup>	Declared value <sup>1</sup>	95% confidence limit <sup>2</sup>	Certification value
Tensile strength	MD kN/m	-2,2	-2,2	22,3	20,1	
EN ISO 10319	CMD kN/m	-2,2	-2,2	22,3	20,1	20,1
Tensile strain	MD %	-9,0 %	-9 %	45 %	36,0 %	
EN ISO 10319	CMD %	-9,0 %	-9 %	45 %	36,0 %	36,0 %
Cone drop diam						
EN 918	mm	4	3	18	21	21
Energy index						
EN ISO 10319	kN/m		0,0	4,5	4,5	4,5
Velocity index						
EN ISO 11058	10 <sup>-3</sup> m/s	-21	-21	70	49	49
Opening size						
EN ISO 12956	O <sub>90</sub> (mm)	0,027	0,027	0,090	0,117	0,117
Mass EN ISO 9864 <sup>3</sup>	g/m <sup>2</sup>	26	-26	260	234 - 286	234 - 286
Static puncture						
EN ISO 12236 <sup>3</sup>	N	-380	-380	3800	3420	3420
<b>Application profile</b>						<b>4</b>

<sup>1</sup>Mean values and tolerances given on a CE document with revision date: The CE document is approved by Notified body ID no: June 1, 2008 0799

<sup>2</sup>The maximum tolerance is applied for determination of the 95% conf. limit when tolerances given on the CE-mark document exceeds the maximum allowable tolerance required in NorGeoSpec 2002. The products are continuously audited to verify that the characteristics fulfils the NorGoeSpec requirements.

<sup>3</sup>The certification values for these characteristics is to be used in delivery control. For the mass per unit area the allowable variation range is given while the minimum value is given for the static puncture strength.

SINTEF is **Notified as a competent body** related to directive 89/106/EEC by the Norwegian Royal Ministry of Trade and Industry

Notified body ID no: 1071  
Products: Geotextiles and geotextile related products  
Tasks: Inspection/Certification

Approved by the NorGeoSpec Technical committee 2008-09-22	Issued by	Approved by
	Hanne Louise Moe	Arnstein Watn