



Certificate No: 0338-CPR-0643

Technical Data Sheet



TG 4040S



Notified Body

TG 4040S is a polypropylene extruded biaxial geogrid manufactured at one of Thrace Nonwovens & Geosynthetics S.A. facilities that have achieved ISO 9001:2008 certification for its systematic approach to quality, as well as ISO 14001:2004 for its safe environmental practices. The construction of the biaxial geogrid makes it ideal for the following applications with its main function being "Reinforcement".

Applications and intended uses of the extruded Biaxial Geogrid

















EN 13249	EN 13250	EN 13251	EN 13253	EN 13254	EN 13255	EN 13257	EN 13265
R	R	R	R	R	R	R	R



R=Reinforcement

It is resistant to commonly encountered soil chemicals, mildew and insects and is non-biodegradable. TG 40405 conforms to the property values listed below. Technical data are based on statistical analysis on 95% confidence limit.

PROPERTY	TEST METHOD	VALUE	METRIC UNITS		TOLERANCE					
MECHANICAL										
Tensile Strength (MD/CD)	EN ISO 10319	Average	kN/m	40/40	-4.0 /-4.0					
Elongation at Maximum Load (MD/CD)	EN ISO 10319	Average	%	10/9	±3.0/±2.7					
Tensile Strength at 2% Strain (MD/CD)	EN ISO 10319	Average	kN/m	14/14	-1.4/-1.4					
Tensile Strength at 5% Strain (MD/CD)	EN ISO 10319	Average	kN/m	25/29	-2.5/-2.9					
Rib Strength (MD/CD)	GRI GG1	Average	kN/m	41/41	-4.1/-4.1					
Junction Strength (MD/CD)	GRI GG2	Average	kN/m	38/38	-3.8/-3.8					
Multi-axial secant stiffness at 0.5% strain (J _{0.5%})	DIN 61551	Average	kN/m	1400	-50					
ENDURANCE										
Weathering Resistance (MD/CD)	EN 12224	Average	%retained strength	100/100	±10/±10					
Resistance to Liquids – Acid (MD/CD)	EN 14030	Average	%retained strength	100/100	±10/±10					
Resistance to Liquids – Alkaline (MD/CD)	EN 14030	Average	%retained strength	100/100	±10/±10					
Resistance to oxidation (MD/CD)	EN ISO 13438	Average	%retained strength	100/100	±10/±10					
Microbiological Resistance (MD/CD)	EN 12225	Average	%retained strength	100/100	±10/±10					
PHYSICAL										
Grid Opening Size (MD/CD)	Measured	Average	mm	40/40	±4/±4					
Carbon Black	ASTM D1603	Minimum	%	2	-					
STANDARD PACKAGING										
Roll Width	Measured	Typical	m	3.95	-0.02					
Roll Length	Measured	Typical	m	30/50	-0.6/-1					

NOTES:

- Thrace Nonwovens & Geosynthetics S.A. reserves the right to alter product specifications at any time without prior notice. It is the responsibility of all users to satisfy themselves that the above data are current.
- The geogrids listed are CE marked and they come along with a CE certificate after a customer request.
- Polypropylene is the constituent polymer used in the production of the TG geogrid series.
- To be covered within one month after installation. Predicted to be durable for more than 100 years in soil temperatures ≤ 25°C and is resistant to highly acid and alkaline environments on the basis of a durability assessment.

ELLASHELLAS

EN ISO 14001:2004

EN ISO 9001:2008

Reg. No: 04013108

Reg. No: 01010018

The information contained herein is furnished without charge or obligation and the recipient assumes all the responsibility for its use. Because conditions for use and handling may vary and are beyond our control, Thrace Nonwovens & Geosynthetics S.A. makes no representation about, and is not responsible or liable for, the accuracy or reliability of said information or performance of any product. Any specification, properties or applications listed herein are provided as information only in no way modify, amend, enlarge or create any warranty. Nothing contained herein is to be construed as permission or as any recommendation to infringe any patent.