PRODUCT DATA SHEET

GSE FabriNet ST-E

Two-layer, three-dimensional drainage geocomposite, consisting of a geonet core, resistant under load, heat-laminated on one side with a geotextile. Geonet core: 100% HDPE (black) - Geotextile 100% Polypropylene (white) - 1a quality. The layers are heat-bonded by thermal lamination. The geocomposite is designed and formulated to perform drainage function under a range of anticipated site loads, gradients and boundary conditions.

AT THE CORE:
Multilayer, multifunctional HDPE geocomposite providing increased durability for drainage, filtration and puncture protection.

Product Specifications

Tested Property	Test Method	Unit	Value(*)			
Geocomposite						
Product Type	---	---	B121		B201	
Tensile Strength MD (T_{max}) CMD (T_{max})	DIN EN ISO 10319	kN/m	14 10		20 16	
In-plane Flow Capacity (q_P); MD (rigid/rigid) i = 1 [a] at 20 kPa at 50 kPa at 100 kPa at 200 kPa	DIN EN ISO 12958	l/(m x s)	 1.5 1.4 1.15 0.8		 1.2 1.05 0.8 0.5	
Ply Adhesion	DIN EN ISO 13426-2/B	N/m	100		100	
Geonet [b]						
Raw Material	---	---	High Density Polyethylene, black			
Density	DIN EN ISO 1183	g/cm³	≥ 0.94			
Thickness at 20 kPa (d)	DIN EN ISO 9863-1	mm	5			
Geotextiles [b]						
Raw Material	---	---	Polypropylene, white			
Unit Weight (pA)	DIN EN ISO 9864	g/m²	120		200	
Tensile Strength MD (T_{max}) CMD (T_{max})	DIN EN ISO 10319	kN/m	8 8		14 14	
Puncture Resistance (x – s) (F_p)	DIN EN ISO 12236	N	1,120		1,890	
Characteristic Opening Size (O_{90})	DIN EN ISO 12956	µm	100		60	
Water Permeability Velocity Index (VI_{H50}) Flux normal to the Plane (q_N)	DIN EN ISO 11058	 mm/s l/(m² x s)	 100 100		 65 65	
Durability Characteristics						
Carbon Black Content [c]	ASTM D 4218	%	2.0 – 3.0			
Oxidative Induction Time (OIT) [c]	ASTM D 3895 (190°C; Pure O_2; 1 atm)	min	100			
UV Resistance [d]	---	---	to be covered within 2 weeks			
Resistance to Oxidation at elevated Oxygen Pressure [c] Tensile Strength and Tensile Elongation – retained values after 14 days	EN ISO 13438 (C1; pH 10; 80°C; 5 MPa)	%	no significant change of initial properties			
Roll Dimensions			**Container Load**		**Truck Load**	
			B121	B201	B121	B201
Roll Width (Geonet Core) (approx.) [e]		m	4.1	4.1	4.1	4.1
Roll Length (approx.) [e]		m	65	65	70	70
Roll Area (approx.)		m²	266.5	266.5	287	287

NOTES:
(*): All values - unless otherwise noted - are guiding values.Minimum values are within the 95% confidence interval.
(**): Leaving a width of approx. 20 cm without heat-bonding at both edges in the MD / on both sides –enabling sufficient geonet overlapping during installation.
(a): Test specimen with 300 x 300 mm.
(b): Component properties prior to lamination.
(c): Geonet properties.
(d): Geotextile properties.
(e): Roll width and length have a tolerance of ± 1%.

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Our commitment to innovation, our focus on quality and our industry expertise allow us the flexibility to collaborate with our clients to develop a custom, purpose-fit solution.

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DURABILITY RUNS DEEP

For more information on this product and others, please visit us at GSEworld.com, call 49.40.767420 or contact your local sales office.

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