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TEXSOIL[®]

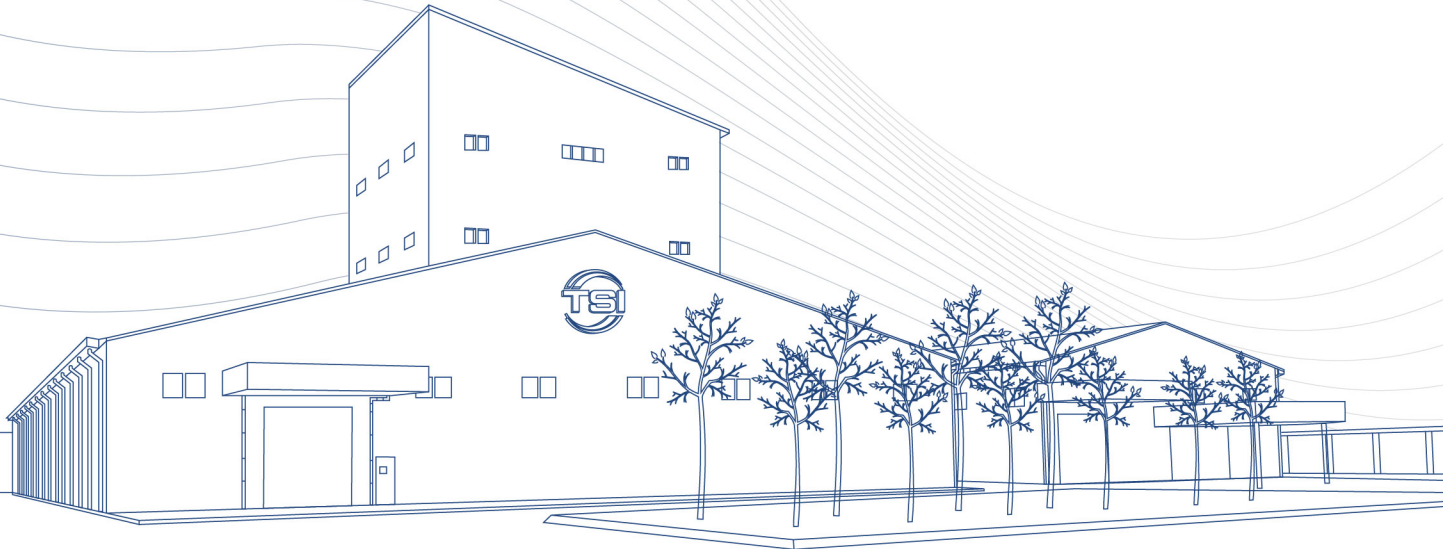
Polyester Nonwoven Geotextile

TEXSOIL®

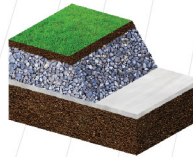
Polyester Nonwoven Geotextile

PT. Trias Spunindo Industri is one of the leading Geosynthetics Manufacturers based in Indonesia with the specialty of producing Nonwoven Geotextile known as TEXSOIL®.

Our products are considered as Geosynthetics materials that has various excellences in synthetic water escapes. TEXSOIL® are made from 100% polyester (PET) continuous filament that are tangled together by a mechanical needle-punch process.



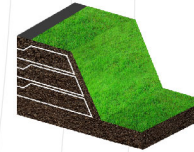
TEXSOIL® APPLICATIONS



SEPARATION

The separation function is one of the most basic function of geotextile, it prevents the inter mixing of two adjacent soil. Some of the application areas:

- Between subgrade and stone base in unpaved or paved roads
- Between subgrade in rail road constructions
- Between land fills and stone base courses



REINFORCEMENT

The reinforcement function of geotextiles is providing strength, in a similar manner as the reinforcing steel, which helps to hold the soil in its place. Some of the application areas:

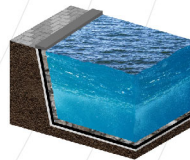
- River Banks
- Mountain Slopes



FILTRATION

The filtration function of geotextiles will permit the passage of water while retaining the soil particles at the same time. Porosity and permeability are the major properties of geotextiles which involves in this filtration function. Some of the application areas:

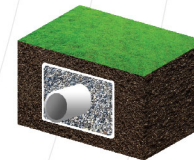
- Pavement Edge Drains



PROTECTION

The protection function in geotextiles helps to shield synthetic membrane from puncture, abrasion and or perforation. Some of the application areas:

- Civil Engineering Applications where Geomembrane is involved as a hydraulic barrier
- Tunnel constructions



DRAINAGE

The drainage function is the ability of nonwoven geotextiles to collect and transport ground water in the plane of the geotextiles. Some of the application areas:

- Agriculture
- Behind Retaining Walls
- Earth Dams

TEXSOIL® APPLICATIONS

1. Civil and road construction
2. Construction & Building affairs
3. Underground drainage
4. Preventing erosion of coastal soils and breakwaters
5. Dam construction
6. Filter in earthen dams
7. Filter in water channels
8. Sludge dewatering process filter
9. Sewage pond and chemicals
10. Liquid and gas collection system
11. Lining and insulation of tunnels
12. Construction of agricultural water storage pool
13. Construction of an artificial lake
14. Construction of evaporation pond of power plant
15. Construction of green roof
16. Protection and drainage systems under the lawn
17. Extraction of swampy lands
18. Railway infrastructure
19. Stabilization of oil and gas transmission lines
20. Electronics

TEXSOIL® SPECIFICATIONS

Properties	Method	Unit	TEX 150-HS	TEX 200-HS	TEX 250-HS	TEX 300-HS	TEX 350-HS	TEX 400-HS	TEX 500-HS	TEX 600-HS
Physical Characteristics Material	Nonwoven Needle Punch Continuous Filament 100 % Polyester Chips									
Physical Properties										
Basic Weight	ASTM D5261	g/m ²	150	200	250	300	350	400	500	600
Thickness	ASTM D5199	mm	1	1.5	1.75	2	2.25	2.25	3	3.8
Mechanical Properties										
WWS Tensile Strength MD	ASTM D4595	kN/m	8	12.5	14	17	23	25	29	34
WWS Elongation MD	ASTM D4595	%	≥50	≥50	≥50	≥50	≥50	≥50	≥50	≥50
WWS Tensile Strength CD	ASTM D4595	kN/m	6.8	11	12	14	18	21.5	25	32.5
WWS Elongation CD	ASTM D4595	%	≥50	≥50	≥50	≥50	≥50	≥50	≥50	≥50
Grab Tensile Strength MD	ASTM D4632	kN	0.5	0.8	0.9	1.2	1.4	1.7	1.9	2.5
Grab Elongation MD	ASTM D4632	%	≥50	≥50	≥50	≥50	≥50	≥50	≥50	≥50
Grab Tensile Strength CD	ASTM D4632	kN	0.4	0.7	0.8	1	1.35	1.6	1.8	2
Grab Elongation CD	ASTM D4632	%	≥50	≥50	≥50	≥50	≥50	≥50	≥50	≥50
Tearing Strength MD	ASTM D4633	kN	0.28	0.35	0.4	0.5	0.7	0.8	0.85	1.2
Tearing Strength CD	ASTM D4633	kN	0.2	0.3	0.35	0.4	0.65	0.7	0.75	0.9
Puncture Resistance	ASTM D6241	kN	1.4	1.8	2.5	3	3.5	4	5	5.5
Hydraulic Properties										
Apparent Opening Sie	ASTM D4751	mm	0.125	0.11	0.11	0.08	0.8	0.075	0.075	0.075
Flow Rate	ISO 11058	L/m ² /s	90	84	80	75	70	64.5	55	50
Form of Supply	Unit		TEX 150-HS	TEX 200-HS	TEX 250-HS	TEX 300-HS	TEX 350-HS	TEX 400-HS	TEX 500-HS	TEX 600-HS
Width	m		5.95	5.95	5.95	5.95	5.95	5.95	5.95	5.95
Length	m		200	150	120	100	80	80	60	50
Area	m ²		1190	892.5	714	595	476	476	357	297.5
Diameter Roll	cm		53	54	52	55	48	51	48	50
Estimated Roll Weight	Kg		178.5	178.5	178.5	178.5	178.5	190.4	178.5	178.5

The data and specifications on the tables are obtained from the manufacturer's laboratory testing.

PRODUCT VARIANT

TEXSOIL[®], besides being called **Nonwoven Geotextile**, can also be referred to as **Nonwoven Needle Punch**, because it follows from mechanical bonding that uses Needle Punch for the Spring Bed (Bedding) Industry, we never call it Nonwoven Geotextile, but refer to it as Nonwoven Needle Punch or Hardpad, because in the Bedding Industry they use the term Hardpad.

VERTICAL GARDEN

The emergence of Vertical Garden is a new solution for everyone who wants to have a beautiful garden at home but has limited land.

GEOBAG

Geobags are sand-filled high strength geotextile pockets that are available in a variety of size and used in river banks, coastal barriers and structures.

PAVING UNDERLAY

Installing a geo-fabric will prevent this from happening and help you paving stone project in the long run. The filter cloth is placed on top of the original soil and your plinth is then over the fabric.

DRAIN WARDEN

The Drain Warden prevents contaminants and sediments from entering the stormwater system and effectively removes coarse sediment, oil, garbage and debris. We produce has been exported to Australia and New Zealand.






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