

## Filament Non-woven Needle Punched PET Geotextile

### Description

The non-woven geotextiles are made from continuous polyester (PET) filament that are tangled together in a needle punched process. The continuous filament achieve their strength and dimensional stability by interlocking. It has three-dimensional structures and offered the functions of filtration, separation, protection, and drainage. It is widely used at drainage systems to filter soil particles and prevent the loss of soil particles, also as a wrapping for perforated pipe, for erosion protection, for the separation of a roads sub base and base course. The textiles are inert to biological degradation and resistant to chemicals, alkalis, and acids.

### Uses

For highway and roads construction, railways and airports, embankments, retaining structures, reservoirs, canals, dams, bank protection, coastal engineering projects, etc.

- ◆ Filtration of soils in drainage applications
- ◆ Separation and reinforcement
- ◆ Prevention of soil movement
- ◆ Cushioning and protection

### Features

- ◆ High strength and elongation, durability, physical and hydraulic properties
- ◆ Superior filtration properties, water permeability, and good friction coefficient
- ◆ Resistance to environmental stress cracking
- ◆ Excellent microbial and corrosion resistance
- ◆ Light-weight, low cost protection for geomembranes
- ◆ Unit area weight: 100-800g/m<sup>2</sup>



### Specification: GB/T17638-1998

No	Unit area weight, g/m <sup>2</sup>	100	150	200	250	300	350	400	450	500	600	800	Notes
1	Unit area weight deviation, %	-6	-6	-6	-5	-5	-5	-5	-5	-4	-4	-4	
2	Thickness, mm≥	0.8	1.2	1.6	1.9	2.2	2.5	2.8	3.1	3.4	4.2	5.5	
3	Width deviation, %	-0.5											
4	Break strength, KN/m ≥	4.5	7.5	10.0	12.5	15.0	17.5	20.5	22.5	25.0	30.0	40.0	Longitudinal and transverse
5	Elongation at break, %	40-80											
6	CBR bursting strength, KN ≥	0.8	1.4	1.8	2.2	2.6	3.0	3.5	4.0	4.7	5.5	7.0	
7	Equivalent opening size O <sub>90</sub> (O <sub>95</sub> ), mm	0.07-0.20											
8	Vertical seepage coefficient, cm/s	K×(10 <sup>-1</sup> -10 <sup>-3</sup> )											K=1.0-9.9
9	Tear strength, KN≥	0.14	0.21	0.28	0.35	0.42	0.49	0.56	0.63	0.70	0.82	1.10	Longitudinal and transverse
10	Length, m	50.0 or customized											
11	Width, m	4.0 – 7.0											