

## GEOLAND HT 500

GEOLAND HT is a high tenacity non-woven needle punctured on both sides made of 100% virgin and high tenacity polypropylene short fibres. Available in white, they are thermally treated and then chilled by calendar.

CIVILROCK attaches the highest importance to the quality of its products and operate a quality assurance system according to ISO 9001 AENOR certificate.

### ADVANTAGES

- High tenacity
- High resistance to alkalinity and inert towards the various chemical elements present in the soil.
- High puncture resistance.
- Possibility of roll widths up to 6.6 m and length on request.
- Service life of more than 25 years in expected in soils with  $4 < \text{ph}$



### APPLICATION

GEOLAND HT is a range of non-woven needle punched geotextiles made of 100% polypropylene high tenacity fibres used for of road construction projects, tunnels, foundations and hydraulics with the following functions:

**Separation:** To prevent the transfer of particles between different layers. It prevents the contact between non compatible materials. It acts as a non-permeable barrier between soils of different structures.

**Protection:** It provides puncture resistance to waterproofing membranes.

**Filtration and drainage:** Transversal permeability allows the passage of the water through the material whilst retaining small particles.

GEOLAND HT is loose laid without tension and must be free from folds and wrinkles; place in direct contact with the ground avoiding any gaps or voids between the substrate and the geotextile.

Continuity between sheets is maintained by simple overlap, seams or thermo-welding.

The composition of 100% polypropylene fibres allows the use of GEOLAND HT geotextile on projects where they are to be subjected to with alkaline environments.

### REGULATIONS

GEOLAND HT are produced in our factory in Cervera (Lleida, Spain) with CE marked certificate n° 0099-CPR-A42-0101 and 0099-CPR-142-0102 in conformity of EN 13249:2001, EN 13250:2001, EN 13251:2001, EN 13252:2001, EN 13253:2001, EN 13254:2001, EN 13255:2001, EN 13256:2001, EN 13257:2001 and EN 13265:2001.

### Geotextiles Polypropylene

TEXSA SYSTEMS SLU reserves the right to modify the information contained herein without prior notice and declines all liability in cases of errors produced due to inappropriate use of the product. The values shown in the technical sheet are the mean values from tests in our lab.

## PACKAGING AND STORAGE

Width (m) 2.2 / 3.3 / 6.6

Other weights and dimensions on request

| Production Standard<br>Width 2.2 m | GEOLAND HT 120 | GEOLAND HT 150 | GEOLAND HT 200 | GEOLAND HT 300 | GEOLAND HT 400 | GEOLAND HT 500 | GEOLAND HT 700 | GEOLAND HT 800 |
|------------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| Length (m)                         | 125            | 125            | 100            | 65             | 55             | 50             | 50             | 50             |
| Number of rolls on each pallet     | 9              | 9              | 9              | 9              | 9              | 9              | 4              | 4              |
| Roll Weight (kg)                   | 33             | 42             | 44             | 43             | 49             | 55             | 77             | 88             |

Storage: Must be store on its original packaging in a dry environment and preferably protected from the weathering until installed

## TECHNICAL PROPERTIES

|                                      | Standard      | GEOLAND HT 120 | GEOLAND HT 150 | GEOLAND HT 200 | GEOLAND HT 300 | GEOLAND HT 400 | GEOLAND HT 500 | GEOLAND HT 700 | GEOLAND HT 800 |
|--------------------------------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| Thickness at 2 kPa load (mm)         | EN ISO 9863-1 | 1.1            | 1.2            | 1.5            | 2.3            | 2.8            | 3.3            | 4.6            | 5.5            |
| Tensile Strength                     |               |                |                |                |                |                |                |                |                |
| DM (kN/m)                            | EN ISO 10319  | 8.2            | 11             | 14.5           | 22             | 29.5           | 35             | 48             | 54             |
| DT (kN/m)                            | EN ISO 10319  | 10.5           | 13             | 18             | 26.5           | 36.5           | 46             | 65             | 75             |
| Elongation                           |               |                |                |                |                |                |                |                |                |
| DM (%)                               | EN ISO 10319  | 56             | 58             | 60             | 64             | 68             | 75             | 100            | 120            |
| DT (%)                               | EN ISO 10319  | 64             | 65             | 66             | 71             | 74             | 80             | 110            | 130            |
| Static Puncture Resistance (CBR) (N) | EN ISO 12236  | 1 585          | 1 900          | 2 900          | 4 300          | 6 150          | 7 900          | 11 000         | 13 000         |
| Dynamic Puncture Resistance (mm)     | EN ISO 13433  | 25             | 22             | 13             | 7              | 2              |                |                |                |
| Opening size (µm)                    | EN ISO 12956  | 90             | 85             | 80             | 75             | 65             | 61             | 57             | 54             |
| Water permeability (m/s)             | EN ISO 11058  | 95*10-3        | 90*10-3        | 71*10-3        | 62*10-3        | 60*10-3        | 60*10-3        | 58*10-3        | 52*10-3        |

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Durability      EN ISO  
12226

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