

Quality Product CertificationSeparation and Filtration

This product has been found to be fit for use in accordance with NorGeoSpec 2012 System for the function given above.

| Certificate no.: | NGS-50308 |
|------------------|---------------------------|
| Date: | 09.09.2022 |
| Valid until: | 08.09.2024 |
| Manufacturer: | Geo&tex 2000 SpA |
| Product: | GEO PP 1NG/08 |
| Product Type: | GTX-N |
| Raw material: | PP |
| Function: | Separation and Filtration |

Issued by

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Approved by

Arnstein Watn, Head of the Technical Committee

NorGeoSpec 2012

The products are regularly audited and tested to verify that the characteristics fulfil the NorGeoSpec 2012 Rev.: 01/14.12.2016 requirements. Approved by the NorGeoSpec Technical Committee: 27.09.2022



Certificate no.: NGS-50308

Quality Product Certification Separation and Filtration

| Quality Product Certification | | | | DoP ¹⁾ | NGS | | | |
|--|-----|-----------------|-------|----------------------------|--|-------------------------------------|--------------------------------------|----------------------------------|
| Characteristic | | Test method | Unit | DoP declared mean value | NGS declared mean value ²⁾ | NGS max. tolerance ³⁾ | NGS declared tolerance ⁴⁾ | NGS control limits ⁵⁾ |
| Mass per unit area | | EN ISO 9864 | g/m² | (-) | 90 | ± 9.0 | ± 9.0 | 81.0 - 99.0 |
| Tensile strength | MD | EN ISO 10319 | kN/m | 6.4 | 6.40 | -0.64 | -0.50 | ≥6.05 |
| | CMD | EN ISO 10319 | kN/m | 6.7 | 6.70 | -0.67 | -0.50 | |
| Tensile strain at tensile strength | MD | EN ISO 10319 | % | 38.0 | 38.0 | -7.6 | -7.6 | ≥37.2 |
| | CMD | EN ISO 10319 | % | 55.0 | 55.0 | -11.0 | -11.0 | |
| Static puncture test (CBR test) | | EN ISO 12236 | kN | 1.000 | 1.000 | -0.100 | -0.100 | ≥0.900 |
| Dynamic perforation test | | EN ISO 13433 | mm | 36 | 36 | +9.0 | +8.0 | ≤44.0 |
| Energy index | | NorGeoSpec 2012 | kN/m | (-) | 1.2 | | 0.0 | ≥1.2 |
| Water permeability normal to the plane, without load | | EN ISO 11058 | m/s | 0.080 | 0.080 | -0.0240 | -0.0240 | ≥0.0560 |
| Characteristic opening size | | EN ISO 12956 | μm | 90 | 90 | ± 27.0 | ± 27.0 | 63.0 - 117.0 |
| Service life | | | years | 100 | 100 | | | |

¹⁾ Manufacturer's Declaration of performance acc. hEN standards

Quality Product Certification: Separation and Filtration

Application profile: 1

²⁾ Manufacturer's declared values

Max. possible NorGeoSpec tolerance according to table 1 Part 1 and Part 2 of the guideline

Manufacturer's declared tolerance; the tolerance for the NorGeoSpec certificate shall be equal or less than the "NGS max. tolerance" (see table 1 Part 1 and Part 2 of the guideline)

NorGeoSpec control limit values regarding fitness for use; these "NGS control limits" are calculated based on the "NGS declared mean values" and the "NGS declared tolerances"; the product has to satisfy these "NGS control limits" during the NorGeoSpec certification process and random product testing