

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-50411 |
|------------------|---------------------------|
| Date: | 09.09.2024 |
| Valid until: | 08.09.2026 |
| Manufacturer: | Geo&Tex 2000 S.p.A. |
| Product: | GEO PP 4NG/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: 04.09.2024



Certificate no.: NGS-50411

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 | (-) | 250.0 | ± 25.0 | ± 25.0 | 225.0 - 275.0 |
| Tensile strength | MD | EN ISO 10319 | kN/m | 21.50 | 21.50 | -2.15 | -2.00 | ≥ 20.00 |
| | CMD | EN ISO 10319 | kN/m | 22.50 | 22.50 | -2.25 | -2.00 | |
| Tensile strain at tensile strength | MD | EN ISO 10319 | % | 46.0 | 46.0 | -9.2 | -9.2 | ≥ 42.0 |
| | CMD | EN ISO 10319 | % | 59.0 | 59.0 | -11.8 | -11.8 | |
| Static puncture test (CBR test) | | EN ISO 12236 | kN | 3.300 | 3.300 | -0.330 | -0.330 | ≥ 2.970 |
| Dynamic perforation test | | EN ISO 13433 | mm | 18.0 | 18.0 | +4.5 | +4.0 | ≤ 22.0 |
| Energy index | | NorGeoSpec 2012 | kN/m | (-) | 4.5 | | 0.0 | ≥ 4.5 |
| Water permeability normal to the plane, without load | | EN ISO 11058 | m/s | 0.0300 | 0.0300 | -0.0090 | -0.0090 | ≥ 0.0210 |
| Characteristic opening size | | EN ISO 12956 | μm | 55.0 | 55.0 | ± 16.5 | ± 16.0 | 39.0 - 71.0 |
| Service life | | | years | 100 | 100 | | | |

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

Quality Product Certification: Separation and Filtration

Application profile: 4

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