

Datasheet geosynthetic barrier ENPEX FPP

180°

| MATERIAL PROPERTIES | | | |
|----------------------------|-------------------|-----------------------------|----------------|
| Property | Unit | Test method | Value |
| Density | g/cm ³ | ISO 1183-87 ASTM D 1505 | 0.900 +/- 0.01 |
| Melt flow range 190/2,16 | g/10min | DIN ISO 1133 ASTM D 1238 | 0.15 - 1.0 |
| Carbon black content (TGA) | % | ASTM D 1603 | 2.0 - 3.0 |
| Carbon black dispersion | | ASTM D 5596 | A1 - A2 |

ENPEX FPP contains approx 97,5% of high quality polymers and 2,5% of carbon black, antioxidants and heat stabilizers.

Certifications such as CE according to EN 13361, EN 13362, EN 13491, EN 13492, EN 13493 und EN 13967; and ASQUAL made by independent test institutes confirm the quality and versatile application possibilities of our geomembranes. Our films have a 10 years warranty and are suitable for worldwide application even in climatically demanding regions.

| DURABILITY | | | |
|--------------------------------|------|--------------|-----------|
| Property | Unit | Test method | Value |
| Oxidative induction time (OIT) | min | ASTM D 3895 | > 100 |
| Stress crack resistance | h | DIN EN 14576 | fulfilled |
| Stress crack resistance | h | ASTM D 1693 | > 2000 |
| Stress crack resistance | h | ASTM D 5397 | > 300 |
| Weathering resistance | - | DIN EN 12224 | fulfilled |
| Root resistance | - | DIN EN 14416 | fulfilled |
| Microbiological resistance | - | DIN EN 12225 | fulfilled |

| FUNCTIONAL PROPERTIES | | | |
|---------------------------------|------|--------------|--------|
| Property | Unit | Test method | Value |
| Foldability at low temperatures | °C | DIN EN 495-5 | < -40 |
| Water absorption after 7 days | % | DIN ISO 175 | < 0.20 |
| Dimensional stability | % | DIN 53377 | +/- 2 |

| MECHANICAL PROPERTIES | | | | | | | | | |
|------------------------------|------|--------------------------|-----------|-------|-------|-------|-------|-------|--|
| Property | Unit | Test method | Value | | | | | | |
| Thickness | mm | | 0,50 | 0,60 | 0,75 | 1,00 | 1,50 | 2,00 | |
| Tolerance of thickness | % | DIN 53370 | +/- 5 | | | | | | |
| Tensile strength at break | Mpa | DIN EN ISO 527 | > 18 | > 18 | > 18 | > 18 | > 18 | > 17 | |
| Elongation at break | % | ASTM D 638 | > 750 | > 750 | > 750 | > 750 | > 750 | > 800 | |
| Tear resistance | N/mm | DIN 53515 ASTM D 1004 | > 45 | > 45 | > 45 | > 45 | > 45 | > 45 | |
| Puncture resistance | N | FTMS 101C | > 120 | > 130 | > 150 | > 170 | > 210 | > 300 | |
| Resistance to static loading | | DIN EN 12730 | fulfilled | | | | | | |
| Bursting pressure | % | DIN 61551 | > 200 | | | | | | |
| Static puncture | KN | DIN EN ISO 12236 | 1,00 | | | | | | |

| REMARKS |
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| This information is no warranty. NPI does not take over any liability for the use of this information. |

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NPI

Specialists in Waterstorage

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About NPI

NPI has now been manufacturing for over 60 years and has become one of Europe's major water storage experts. The cooperation with worldwide partners, dealers, agents and suppliers, combined with external independent engineers, the high quality materials and solutions supplied, is the base of our success. Success we share with our partners.

Certified quality

Besides various Certificates as KIWA, AEO and ISO 9001, we are committed to quality and continuous improvement. In addition to our commitment to excellent product quality, research and development means that our resellers can enhance their company's image by offering their customers good NPI value and an NPI water tank that will meet their needs for many years to come.

