

## Geosynthetic barrier PE - HD

### MATERIAL PROPERTIES

| Property                   | Unit              | Test method                 | Value          |
|----------------------------|-------------------|-----------------------------|----------------|
| Density                    | g/cm <sup>3</sup> | ISO 1183-87<br>ASTM D 1505  | 0.950 +/- 0.01 |
| Melt flow range 190/2,16   | g/10min           | DIN ISO 1133<br>ASTM D 1238 | 0.05 - 0.30    |
| Carbon black content (TGA) | %                 | ASTM D 1603                 | 2 - 3          |
| Carbon black dispersion    | -                 | ASTM D 5596                 | A1 - A2        |

### DURABILITY

| Property                       | Unit | Test method  | Value     |
|--------------------------------|------|--------------|-----------|
| Oxidative induction time (OIT) | min  | ASTM D 3895  | > 100     |
| Oxidative induction time (OIT) | -    | DIN EN 14575 | erfüllt   |
| Stress crack resistance        | h    | DIN EN 14576 | > 200     |
| 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  | < 0.1 |
| Dimensional stability           | %    | DIN 53377    | +/- 1 |

wepelen PE-HD 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; DiBT and ASQUAL made by independent test institutes confirm the quality and versatile application possibilities of our geomembranes. Our films have a 10years warranty and are suitable for worldwide application even in climatically demanding regions.

### MECHANICAL PROPERTIES

| Property                  | Unit | Test method                  | Value |       |       |       |       |       |
|---------------------------|------|------------------------------|-------|-------|-------|-------|-------|-------|
| Thickness                 | mm   |                              | 0,50  | 0,75  | 1,00  | 1,50  | 2,00  | 2,50  |
| Tolerance of thickness    | %    | DIN 53370                    | +/- 5 |       |       |       |       |       |
| Tensile strength at yield | Mpa  | DIN EN ISO 527<br>ASTM D 638 | > 16  | > 16  | > 16  | > 17  | > 17  | > 17  |
| Elongation at yield       | %    |                              | > 8   | > 9   | > 9   | > 10  | > 10  | > 10  |
| Tensile strength at break | Mpa  |                              | > 27  | > 27  | > 27  | > 29  | > 29  | > 29  |
| Elongation at break       | %    |                              | > 700 | > 700 | > 750 | > 750 | > 750 | > 750 |
| Tear resistance           | N/mm | DIN 53515<br>ASTM D 1004     | > 120 | > 125 | > 130 | > 130 | > 130 | > 130 |
| Puncture resistance       | N    | ASTM D 4833                  | -     | > 240 | > 320 | > 480 | > 640 | > 800 |
| Bursting pressure         | %    | DIN 61551                    | > 15  |       |       |       |       |       |
| Static puncture           | KN   | DIN EN ISO 12236             | 5,00  |       |       |       |       |       |

### REMARKS

This information is no warranty. The company RKW-AG does not take over any liability for the use of this information.