

**Technical Data Sheet**

## High Density Polyethylene (HDPE) Single-Side Textured Geomembrane

| Properties                     | Unit              | Test Method     | Test Frequency       | Min Average Values                                                |      |      |      |      |      |      |
|--------------------------------|-------------------|-----------------|----------------------|-------------------------------------------------------------------|------|------|------|------|------|------|
| Thickness<br>(min. ave.)       | mm                | D5994           | per roll             | 0.75                                                              | 1.00 | 1.25 | 1.50 | 2.00 | 2.50 | 3.00 |
| Density                        | g/cm <sup>3</sup> | D 792<br>D 1505 | 90,000 kg            | 0.94                                                              | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Tensile Properties             |                   |                 |                      |                                                                   |      |      |      |      |      |      |
| - yield strength               | N/mm              | D 6693          | 9,000 kg             | 11                                                                | 15   | 18   | 22   | 29   | 37   | 44   |
| - break strength               | %                 |                 |                      | 12                                                                | 12   | 12   | 12   | 12   | 12   | 12   |
| - yield elongation             | N/mm              |                 |                      | 8                                                                 | 10   | 13   | 16   | 21   | 26   | 32   |
| - break elongation             | %                 |                 |                      | 100                                                               | 100  | 100  | 100  | 100  | 100  | 100  |
| Tear Resistance<br>(min. ave.) | N                 | D 1004          | 20,000 kg            | 93                                                                | 125  | 160  | 190  | 250  | 315  | 375  |
| Puncture Resistance            | N                 | D 4833          | 20,000 kg            | 200                                                               | 270  | 335  | 400  | 535  | 670  | 800  |
| Carbon Black Content           | %                 | D 4218          | 9,000 kg             | 2-3                                                               | 2-3  | 2-3  | 2-3  | 2-3  | 2-3  | 2-3  |
| Carbon Black Dispersion        | Category          | D 5596          | 20,000 kg            | in 10 different views: 9 in Categories 1 or 2 and 1 in Category 3 |      |      |      |      |      |      |
| Oxidative Induction Time       | minutes           |                 |                      |                                                                   |      |      |      |      |      |      |
| - Standard OIT                 |                   | D 3895          | 90,000 kg            | 100                                                               | 100  | 100  | 100  | 100  | 100  | 100  |
| - High Pressure OIT            |                   | D 5885          |                      | 400                                                               | 400  | 400  | 400  | 400  | 400  | 400  |
| Oven Aging at 85° C            | %                 | D 5721          | per each formulation |                                                                   |      |      |      |      |      |      |
| - Standard OIT                 |                   | D 3895          |                      | 55                                                                | 55   | 55   | 55   | 55   | 55   | 55   |
| - High Pressure OIT            |                   | D 5885          |                      | 80                                                                | 80   | 80   | 80   | 80   | 80   | 80   |
| UV Resistance                  | %                 | D 7238          | per each formulation | 50                                                                | 50   | 50   | 50   | 50   | 50   | 50   |
| - High Pressure OIT            |                   | D 5885          |                      |                                                                   |      |      |      |      |      |      |

**Notes:**

- UV Resistance is based on percent retained value regardless of the original High Pressure – OIT value.
- Roll widths and lengths have a tolerance of  $\pm 1\%$

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