## TITAN 60HD 60mil smooth hdpe geomembrane



Titan HD is a smooth high-density polyethylene (HDPE) geomembrane manufactured with the highest quality resin specifically formulated for flexible geomembranes. This product is used in applications that require excellent chemical resistance and endurance properties. This product specification meets GRI-GM13.

| TESTED PROPERTY   | TEST METHOD  | FREQUENCY               | UNIT ENGLISH<br>(METRIC)                          | VALUE ENGLISH<br>(METRIC)         |
|---|--|-------------------------|---|-----------------------------------|
|   |  |                         |   |                                   |
| Thickness<br>Lowest individual reading  | ASTM D 5199  | every roll              | mil (mm)  | 60 (1.50)<br>54 (1.35)            |
| Density   | ASTM D 1505  | 200,000 lbs (90,000 kg) | g/cm²(min)  | 0.940                             |
| Tensile Properties (each direction)<br>Strength at Break<br>Strength at Yield<br>Elongation at Break<br>Elongation at Yield | ASTM D 6693, Type IV<br>Dumbell, 2 ipm<br>(50mm/min)<br>G.L. 2.0 in (50mm)<br>G.L. 1.3 in (33mm) | 20,000 lbs (9,000 kg)   | lb/in-width (N/mm)<br>lb/in-width (N/m)<br>%<br>% | 228 (40)<br>126 (22)<br>700<br>12 |
| Tear Resistance   | ASTM D 1004  | 45,000 lbs (20,000 kg)  | lb (N)  | 42 (187)                          |
| Puncture Resistance   | ASTM D 4833  | 45,000 lbs (20,000 kg)  | lb (N)  | 108 (480)                         |
| Carbon Black Content  | ASTM D 1603*/4218  | 20,000 lbs (9,000 kg)   | % (range)   | 2.0 – 3.0                         |
| Carbon Black Dispersion   | ASTM D 5596  | 45,000 lbs (20,000 kg)  | Note <sup>(1)</sup>                               | Note <sup>(1)</sup>               |
| Notched Constant Tensile Load   | ASTM D 5397,<br>Appendix   | 200,000 lbs (90,000 kg) | hr  | 300                               |
| Oxidative Induction Time  | ASTM D 3895, 200 °C;<br>O2, 1 atm  | 200,000 lbs (90,000 kg) | min   | >100                              |
| TYPICAL ROLL DIMENSIONS   |  |                         |   |                                   |
| Roll Length <sup>(2)</sup>  |  |                         | ft (m)  | 560 (171)                         |
| Roll Width <sup>(2)</sup>   |  |                         | ft (m)  | 22.5 (6.86)                       |
| Roll Area   |  |                         | ft (m)  | 12,600 (1,171)                    |

NOTES:

1. Dispersion only applies to near spherical agglomerates. 9 of 10 views shall be Category 1 or 2. No more than 1 view from Category 3.

2. Roll Lengths and widths have a tolerance of  $\pm$ 1%. HDPE Smooth is available in rolls weighing approximately 4,000 lb (1,800 kg). All geomembranes have dimensional stability of  $\pm$ 2% when tested according to AST MD 1204 and LTB of <-77° when tested according to AST MD 746

\*Modified

This data is provided for informational purposes only. Titan Environmental Containment Ltd. makes no warranties as to the suitability or the fitness for a specific use or merchantability of the products referred to, no guarantee of satisfactory results from reliance upon contained information or recommendations and disclaims all liability from resulting loss or damage. This information is subject to change without notice, please check with Titan Environmental Containment Ltd. for current updates.

## **Titan Environmental Containment**

Toll free: 1-866-327-1957 | info@titanenviro.com | TitanEnviro.com