## 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 (METRIC)	VALUE ENGLISH (METRIC)
Thickness Lowest individual reading	ASTM D 5199	every roll	mil (mm)	60 (1.50) 54 (1.35)
Density	ASTM D 1505	200,000 lbs (90,000 kg)	g/cm (min)	0.940
Tensile Properties (each direction) Strength at Break Strength at Yield Elongation at Break Elongation at Yield	ASTM D 6693, Type IV Dumbell, 2 ipm (50mm/min) G.L. 2.0 in (50mm) G.L. 1.3 in (33mm)	20,000 lbs (9,000 kg)	lb/in-width (N/mm) lb/in-width (N/m) % %	228 (40) 126 (22) 700 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, Appendix	200,000 lbs (90,000 kg)	hr	500
Oxidative Induction Time	ASTM D 3895, 200°C; 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			ft² (m²)	12,600 (1,171)

## NOTES:

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**

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

<sup>2.</sup> 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 ASTM D 746 \*Modified