



# UTD HDPE Geomembrane

UTD HDPE is a smooth, high quality, high density polyethylene (HDPE) geomembrane produced from specially formulated, virgin polyethylene resin which contains approximately 97.5% polyethylene, 2.5% carbon black and trace amounts of antioxidants and heat stabilizers. UTD HDPE has excellent resistance to UV radiation. These product specifications meet or exceed GRI GM 13.

## Technical Data Sheet

Tested Property	Test Method	Frequency	Nominal Value							
			UTD HD 0.30	UTD HD 0.50	UTD HD 0.75	UTD HD 1.00	UTD HD 1.50	UTD HD 2.00	UTD HD 2.50	UTD HD 3.00
Density, g/cm	ASTM D 1505	every 5th roll	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Carbon Black Content, %	ASTM D 1603	every 5th roll	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Carbon Black Dispersion	ASTM D 5596	every 5th roll	+Note 1	+Note 1	+Note 1	+Note 1	+Note 1	+Note 1	+Note 1	+Note 1
Notched Constant Tensile Load, hrs	ASTM D 5397, Appendix	90,000 kg	400	400	400	400	400	400	400	400
Thickness, mm	ASTM D 5199	every roll	0.3	0.5	0.75	1.0	1.5	2.0	2.5	3.0
Oxidative Induction Time, minutes	ASTM D 3895, 200°C; O <sub>2</sub> , 1 atm	90,000 kg	>100	>100	>100	>100	>100	>100	>100	>100
Roll Length (approximate), m			200	420	280	210	140	105	85	70
Roll Width, m			7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Roll Area, m <sup>2</sup>			1,420	2,982	1,960	1,470	980	735	595	490
40' Container, roll			35	16	16	16	16	16	16	16
Tensile Properties Strength at Break, N/mm-width Strength at Yield, N/mm-width Elongation at Break, % Elongation at Yield, %	ASTM D 6693, Type IV Dumbbell, 2 ipm  G.L. 51 mm (2.0 in) G.L. 33 mm (1.3 in)	every 5th roll	11 7 750 17	18 10 800 17	26 14 800 17	35 19 800 17	53 29 800 17	70 38 800 17	88 48 800 17	105 57 800 17
Tear Resistance, N	ASTM D 1004	every 5th roll	45	75	113	150	225	300	375	450
Puncture Resistance, N	ASTM D 4833	every 5th roll	144	240	360	480	680	840	950	1,200
Melt Index	ASTM D 1238, Cond. E	20,000 kg	<=1.0	<=1.0	<=1.0	<=1.0	<=1.0	<=1.0	<=1.0	<=1.0

**UNITED GEOSYNTHETICS (ASIA) CO., LTD.**

16E, Neich Tower, 128 Gloucester Road, Wanchai, Hong Kong

E-Mail : [unitedgeo.t@gmail.com](mailto:unitedgeo.t@gmail.com)

