

# 1.0 mm LLDPE

## PRODUCT DESCRIPTION

### SMOOTH GEOMEMBRANE 5.8/7.0

LLDPE is a smooth linear low density polyethylene (LLDPE) geomembrane manufactured with the highest quality resin specifically formulated for flexible geomembranes. This product is used in applications that require increased flexibility and elongation properties where differential or localised subgrade settlements may occur such as in landfill closure application.



TESTED PROPERTY	TEST METHOD	FREQUENCY	VALUES(*)	
THICKNESS <sup>(1)</sup> mm	ASTM D 5199	EVERY ROLL	1.00	
DENSITY, g/cm <sup>3</sup> (MAX)	ASTM D 792	90,000 kg	0.939	
TENSILE PROPERTIES (EACH DIRECTION)	ASTM D 6693, TYPE IV			
STRENGTH AT BREAK, N/mm	DUMBBELL, 2 imp	9,000 kg	26	
ELONGATION AT BREAK, (%)	G.L. 50 mm		750	
TEAR RESISTANCE, N	ASTM D 1004	20,000 kg	95	
PUNCTURE RESISTANCE, N	ASTM D 4833	20,000 kg	238	
CARBON BLACK CONTENT, % (RANGE)	ASTM D 4218	9,000 kg	2.0-3.0	
CARBON BLACK DISPERSION	ASTM D 5596	20,000 kg	NOTE <sup>(2)</sup>	
OXIDATIVE INDUCTION TIME (OIT) min	ASTM D 3895 (200°C, O <sub>2</sub> , 1atm)	90,000 kg	>100	
<b>TYPICAL ROLL DIMENSIONS</b>				
ROLL LENGTH <sup>(3)</sup> , (m)			210	210
ROLL WIDTH <sup>(3)</sup> , (m)			5.8	7.0
ROLL AREA <sup>(3)</sup> , (m <sup>2</sup> )			1218	1470
STANDARD CONTAINER, ROLL			15	15

#### NOTES:

- (\*) All values-unless otherwise noted are minimum average values.
- <sup>(1)</sup> Minimum Average Thickness: Nominal -5%
- <sup>(2)</sup> Dispersion only applied to near spherical agglomerates 9 of 10 views shall be category 1 or 2. No more than 1 view from Category 3.
- <sup>(3)</sup> Roll lengths and widths have a tolerance of  $\pm 1\%$
- TCS HD is available in rolls weighing approximately (1200 kg)
- All HD geomembranes have dimensional stability of  $\pm 2\%$  when tested according to ASTM D 1204 and LTB of  $> -77\text{C}$  when tested according to ASTM D 746.

1. TCS Geotechnics is a trading name of Technical Civils Solutions Ltd.
2. TCS Geotechnics Ltd reserves the right to alter product specifications without prior notice.
3. It is the responsibility of all users to satisfy themselves that the above data is current.
4. The above figures are average values obtained from testing to current EN ISO standards.
5. TCS Ltd cannot accept responsibility for the performance of these products as the conditions of use are beyond our control.
6. Installation details are available on request.

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