

MACLINE TDH

TEXTURED HIGH DENSITY POLYETHYLENE (HDPE) GEOMEMBRANES

MACLINE TDH is a high density polyethylene geomembrane (textured surface on both sides) manufactured from maximum quality polyethylene resins, that comply with the most rigorous requirements established for their use. Geomembrane **MACLINE TDH** contains not less than 97% of pure polyethylene polymer and a balance not higher than 3% of carbon black, antioxidants and thermal stabilizers. The product does not contain plasticizers or fillers that could migrate over time. Textured HDPE improves the friction between the liner and the subgrade. Geomembrane **MACLINE TDH** are manufactured under permanent quality control and comply with national and international standards.

SURFACE: TEXTURED/TEXTURED RAW MATERIAL CHARACTERISTICS			
Property	Unit	Test Method	Value
Sheet density	g/cm ³	ASTM D-792	0.940
Melt index	g/10min	ASTM D-1238, 190/2,16	1.0
Carbon black content (2)	%	ASTM D-4218	2.0 - 3.0
Carbon black dispersion	Category	ASTM D-5596	Cat.1/ Cat.2
OIT—standard (avg.)	min	ASTM D-3895	100

DURABILITY CHARACTERISTICS			
UV Resistance - %retained after 1600 hr HP OIT (min. avg.)	%	GRI-GM-11 ASTM D-5885	50

GEOMEMBRANE PHYSICAL - MECHANICAL PROPERTIES			MACLINE TDH		
Tested Property	Unit	Test Method	100	150	200
Thickness (min. avg.)	mm	ASTM D-5199	1.00	1.50	2.00
Thickness (min.)	mm	ASTM D-5199	0.95	1.43	1.90
Asperity height (min. avg.)	mm	ASTM D-7466	0.40	0.40	0.40
Tensile properties (3):		ASTM D-6693			
• Tensile strength at yield	kN/m		15	22	29
• Elongation at yield	%		12	12	12
• Tensile strength at break	kN/m		13	16	21
• Elongation at break	%		100	100	100
Puncture resistance	N	ASTM D-4833	267	400	534
Tear Resistance (min. avg.)	N	ASTM D-1004	125	187	249
Dimensional stability (min. avg.)	%	ASTM D-1204	±2.0		

NOTES:

- (1) Correlation table is available for ASTM D-792 and ASTM D-1505. Both methods give the same result.
- (2) Correlation table is available for ASTM D-1603 and ASTM D-4218. Both methods give the same result.
- (3) Values are AVERAGE MINIMUM values.

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