

## MACLINE SDH

### HIGH DENSITY POLYETHYLENE (HDPE) GEOMEMBRANES

**MACLINE SDH** is a high density polyethylene geomembrane (smooth surfaces on both sides) manufactured from maximum quality polyethylene resins, that comply with the most rigorous requirements established for their use.

Geomembrane **MACLINE SDH** 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.

Geomembrane **MACLINE SDH** are manufactured under permanent quality control and comply with national and international standards.

SURFACE: SMOOTH/SMOOTH RAW MATERIAL CHARACTERISTICS			
Property	Unit	Test Method	Value
Sheet density	g/cm <sup>3</sup>	ASTM D-1505	0.940
Melt index	g/10min	ASTM D-1238, 190/2,16	1.0
Carbon black content (2)	%	ASTM D-4218	2.0
OIT—standard (avg.)	min	ASTM D-3895	100
OIT—HP (avg.)	min	ASTM D-5885	400

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

GEOMEMBRANE PHYSICAL - MECHANICAL PROPERTIES			MACLINE SDH					
Tested Property	Unit	Test Method	050	075	100	150	200	250
Thickness (min. avg.)	mm	ASTM D-5199	0.50	0.75	1.00	1.50	2.00	2.50
Thickness (min.)	mm	ASTM D-5199	0.45	0.68	0.90	1.35	1.80	2.25
<b>Tensile properties (3):</b>		ASTM D-6693						
• Tensile strength at yield	kN/m		8	11	15	23	30	38
• Elongation at yield	%		13	13	13	13	13	13
• Tensile strength at break	kN/m		14	21	28	43	57	71
• Elongation at break	%		700	700	700	700	700	700
Puncture resistance	N	ASTM D-4833	176	263	352	530	703	1059
Tear Resistance (min. avg.)	N	ASTM D-1004	65	93	125	187	249	374
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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