

Hydro WMS Ltd - 1.0mm PE Geomembrane Specification

Properties	Test Method	Nominal Values
Thickness (mm)	ASTM D 5199/ UNE-EN ISO 1849-2	1.0
Low temperature brittleness (°C)	ASTM D 746, cond B	70
Oxidative induction time (minutes)	ASTM D 3895/ EN ISO 11357-3 (200°C, Pure O ₂ 1Atm)	100
Dimensional stability (each direction) %	ASTM D 1204 (100°C 1 hour)	±2
Melt flow Index g/10 minutes	ASTM D 1238	≤1.2
Water Permeability (m ³ /m ² /day)	UNE-EN 14150	<1.1 ⁻⁶
Stress Crack Resistance (h)	UNE-EN 14576 ASTM D 5397	>300
		Minimum Values
Thickness (mm)	ASTM D 5199/ UNE-EN ISO 1849-2	0.91
Density (g/cm ³)	ASTM D 792/1505A/ UNE-EN ISO 1183	0.92
Tensile Strength at break (MPa)	UN-EN ISO 527-3 Type 5	30 (26)
Elongation at break (%)	UN-EN ISO 527-3 Type 5	800 (≥700)
Tear resistance (N/mm)	ASTM D 1004/ UNE-ISO 34-1	≤100
Puncture resistance (kN)	SM D 4833/ UNE-EN ISO 12236	2.5
Carbon Black content (%)	ASTM D 1603/ UNE 53375-2 ISO 18553	2.0 – 3.0

*Values shown are nominal with 95% confidence level

**pH - Resistant to all naturally occurring soil acids and alkalis

***Chemical/biological resistance - Resistance to all substances found to naturally occur in soils and rainwater. Detailed information would need to be provided to geomembrane manufacturer in instances of contaminated land.