



HDPE SMOOTH GEOMEMBRANE

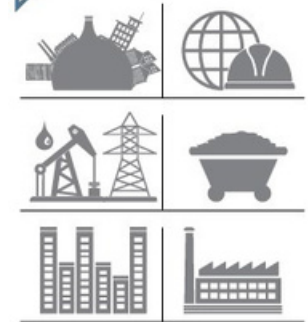


GeoLiner HDS 1.0

GeoLiner HDS is made of high density polyethylene (HDPE) material and is a smooth geomembrane liner on both sides. High elasticity and shear strength properties provide superior sealing performance in mining sites and waste storage areas.

MECHANICAL - PHYSICAL PROPERTIES	VALUE	UNIT	TOLERANCE
Thickness ASTM D 5199	1.0	mm	+/- 10%
Tensile Properties (ASTM D 6693)			
Tensile strength at yield	15	kN/m	(min. Avg.)
Tensile strength at break	27	kN/m	(min. Avg.)
Elongation at yield	12	%	(min. Avg.)
Tear Resistance ASTM D 1004	125	N	(min. Avg.)
Static Puncture Resistance (CBR) ASTM D 4833	320	N	(min. Avg.)
Dimensional Stability (each direction) ASTM D 1204	+/- 2	%	-
RAW MATERIAL CHARACTERISTICS			
Density ASTM D 1505	≥ 0.940	g/cm ³	-
Melt Flow Index (DIN EN ISO 1133) (190°C/5.0 kg) (190°C/2.16 kg)	≤ 3	g/10 min	-
Carbon Black Content ASTM D 4218	2-3	%	-
Carbon Black Dispersion ASTM D 4218	1/2	Category	-
DURABILITY UV RESISTANCE			
UV Resistance Oxidative Induction		Yes	
Time (OIT) ASTM D 3895	≥ 100	min	-
Stress Cracking Resistance ASTM D 5397	≥ 500	hour	
Oven Aging-HP OIT (after 90 days) ASTM D 5585	80	%	(min. Avg.)

APPLICATION AREAS



FUNCTIONS



*For the optimisation and improvement process of the technical characteristics of the products, the producer reserves the facility to modify standard and characteristics at the product without any warning. The information contained herein is to the best of our knowledge accurate, but since the circumstances and conditions in which it may be used are beyond our control, we do not accept any liability for any loss or damage, however arising, which results directly or indirectly from the use of such information nor do we offer any warranty or immunity against patent infringement.

(*): All values - unless otherwise noted - are nominal values. Values in brackets are minimum values within the 95% confidence interval.
 (a): Tolerance ±10% for the lowest individual reading - Special thickness available upon request.
 (b): Dispersion only applies to near spherical agglomerates. 9 of 10 views shall be category 1 or 2. No more than 1 view from category 3.
 (c): Standard test conditions: 190°C / 5.0 kg.
 (d): Test-Conditions: 20 hours UV cycle at 75°C followed by 4 hours condensation at 60°C.
 (e): UV Resistance is based on percent retained value regardless of the original High Pressure - OIT value.
 (f): Roll widths and lengths have a tolerance of ±1%.