



→ PRODUCT

- Non-reinforced geomembrane, homogeneous, black, made of flexible polypropylene (FPP).
- Designed for:
 - Retention reservoirs for chemical products.
 - Landfill cover lining.
 - Waterproofing of ponds, lagoons, canals, reservoirs.

→ CHARACTERISTICS

- FPP contains approx 97,5% of high quality polymers and 2,5% of carbon black, antioxidants and heat stabilizers.
- Certifications such as CE according to EN 13361, EN 13362, EN 13491, EN 13492, EN 13493 und EN 13967; and ASQUAL made by independent test institutes confirm the quality and versatile application possibilities of our geomembranes.
- Our films have a 10 years warranty and are suitable for worldwide application even in climatically demanding regions.

→ INSTALLATION

- Assembly of the geomembrane is achieved by hot air or, hot wedge or extrusion welding.
- The weldability and the quality of the weldings done on site can be influenced by the atmospheric conditions (temperature, humidity of the air) and also by the state of the surface of the geomembrane (clean surface, more or less wetness of the surface), the welding conditions (temperature, speed, pressure, cleaning of the surface) and must be adapted accordingly.
- An anti-puncturing geotextile or composite protection (protection and draining) should be placed in position before the geomembrane, on any rough surface.
- Generally when laying gravelly sand, gravel, selected fill or concrete on a geomembrane, a geotextile (protection against dynamic puncturing) should be placed in between.

→ STORAGE AND STANDARD PACKAGING

- Store in a dry unheated space. Rolls to be parallel and in original packing.
- Do not stack in cross form or under pressure.
- The storage area must be of such a nature as not to damage the geomembrane.

MATERIAL PROPERTIES

→ PROPERTY	UNIT	TEST METHOD	VALUE
Density	g/cm ³	ISO 1183-87 ASTM D 1505	0.900 +/- 0.01
Melt flow range 190/2,16	g/10min	DIN ISO 1133 ASTM D 1238	0.15 - 1.0
Carbon black content (TGA)	%	ASTM D 1603	2.0 - 3.0
Carbon black dispersion	-	ASTM D 5596	A1 - A2

DURABILITY

→ PROPERTY	UNIT	TEST METHOD	VALUE
Oxidative induction time (OIT)	min	ASTM D 3895	> 100
Stress crack resistance	h	DIN EN 14576	fulfilled
Stress crack resistance	h	ASTM D 1693	> 2000
Stress crack resistance	h	ASTM D 5397	> 300
Weathering resistance	-	DIN EN 12224	fulfilled
Root resistance	-	DIN EN 14416	fulfilled
Microbiological resistance	-	DIN EN 12225	fulfilled

FUNCTIONAL PROPERTIES

→ PROPERTY	UNIT	TEST METHOD	VALUE
Foldability at low temperatures	°C	DIN EN 495-5	< -40
Water absorption after 7 days	%	DIN ISO 175	< 0.20
Dimensional stability	%	DIN 53377	+/- 2

MECHANICAL PROPERTIES

→ PROPERTY	UNIT	TEST METHOD	VALUE				
Thickness	mm		0,50	0,75	1,00	1,50	2,00
Tolerance of thickness	%	DIN 53370	+/- 5				
Tensile strength at breaking point	Mpa	DIN EN ISO 527	>18	>18	>18	>18	>17
Elongation at breaking point	%	ASTM D 638	> 750	> 750	> 750	> 750	> 800
Tear resistance	N/mm	DIN 53515 ASTM D 1004	> 45	> 45	> 45	> 45	> 45
Puncture resistance	N	FTMS 101C	> 120	> 150	> 170	> 210	> 300
Resistance to static loading	-	DIN EN 12730	fulfilled				
Bursting pressure	%	DIN 61551	> 200				
Static puncture	KN	DIN EN ISO 12236	1,00				

THICKNESS	WIDTH	LENGTH
1,0 mm	6 m	100 m
1,5 mm	6 m	135 m
2,0 mm	6 m	100 m
2,5 mm	6 m	100 m

Delivery in roll form with cardboard cores on pallets.