



# Verdaliner 700 Reinforced Synthetic Polyethylene Geomembrane

Roofing and waterproofing solutions to facilities designed for temporary storage of waste. Barriers to permanent closure and / or temporary in landfills (leachate and odours reduction). Reclamation with permanent safety measures for contaminated sites (fumes, odour and dust suppression), waterproofing systems for biopiles, bioreactors and biological treatment beds.

## Basic fabric

Geomembrane green, made with a triple coated low density polyethylene (LDPE), reinforced with armor inner lining of high density polyethylene (HDPE). The geomembrane is UV stabilised.

## Technical specification

Item	Values	Test methods
Weight	700 [g/m <sup>2</sup> ]	UNI EN 1849-2
Thickness	0,8 [mm]	UNI EN 1849-2
Tensile strength MD	38 [kN/m]	UNI EN ISO 527-4
Tensile strength CMD	36 [kN/m]	UNI EN ISO 527-4
Elongation at maximum load MD	38 [%]	UNI EN ISO 527-4
Elongation at maximum load CMD	25 [%]	UNI EN ISO 527-4
Static puncture resistance	7,1 [kN]	UNI EN ISO 12236
Shear strength of joints	1612 [N]	UNI EN ISO 12317-2
Temperature resistance (Range)	- 30° ≤ T°C ≤ 70° -	
UV resistance (Grade)	360 Kly	DIN 54004
Liquid permeability	< 10 <sup>-6</sup> [m <sup>3</sup> ·m <sup>-2</sup> ·d <sup>-1</sup> ]	UNI EN 14150
Gas tightness	< 40·10 <sup>-6</sup> [m <sup>3</sup> m <sup>-2</sup> d <sup>-1</sup> ]	ASTM D 1434
Resistance to weathering	Variation of tensile strength and tensile elongation ≤ 25%	UNI EN 12224
Resistance to oxidation	Variation of tensile strength and tensile elongation ≤ 25%	UNI EN 14575
Size available		
Cover Up factory pre-welded membranes can be delivered as:	Standard: Max width 20m Custom: Max width:50m	

-The technical data above are derived from accurate laboratory tests performed by the manufacturer. Tolerance 10%-

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# Verdaliner 700 Reinforced Synthetic Polyethylene Geomembrane

Verdaliner 700 consists in a solid woven HDPE structure reinforced and coated on both side with a LDPE film

Polymeric Geosynthetic Barrier for the use in landfills



Annex ZA of EN 13493

intended function: **barrier**



Tensile strength,	MD	$F_{max}$	1930 N/5cm - 150 N/5cm	EN ISO 527-4
	CMD	$F_{max}$	1935 N/5cm - 150 N/5cm	EN ISO 527-4
Static puncture resistance		$F_P$	7.19 kN - 0.6 kN	EN ISO 12236
Water tightness			$< 10^{-6} \text{ m}^3/(\text{m}^2 \text{ d})$	EN 14150
Gas tightness			$95.7 \times 10^{-9} \text{ mol}/(\text{m}^2 \text{ s})$	ASTM D 1434
Durability	Verdaliner 700 consist purely from polyethylene.			
Weathering resistance acc. to EN 12224, under UV doses of 350 MJ/m <sup>2</sup> : residual tensile properties of >90%.				

**The polymeric geosynthetic barrier if exposed up to one year under European climatic conditions will retain more than 90% of its original tensile properties.**

Oxidation resistance acc. to EN 14575: residual tensile properties of >95%.  
Resistance against environmental stress cracking acc. to EN 14576: npd

**The polymeric geosynthetic barrier is durable in natural soil with  $4 < \text{pH} < 9$  and soil temperature  $< 25^\circ\text{C}$  for a minimum of 25 years service life.**

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