

Technical Data Sheet: 3D-UNI Premium Pool Membrane

Product Description: Premium 3D Pool membrane a PVC single ply membrane, designed with surface real-stone appearance, dry-stone feel and grip. Enhanced acrylic top coat protection layer, reinforced with Polyester scrim. Based upon EN 15836-2 2010-8

Product characteristics: Premium 3D pool membrane is formulated with enhanced surface acrylic coating ensuring superior stain resistance & clean-ability properties, exceptional UV resistance, as well as dry non-slip grip.

Properties	Units	Requirements	Test Method
Aspect		No visible defect	EN 1850-2
Average thickness	mm	1.55 ± 5 %	EN 1849-2 c), d)
Flatness	mm	≤ 10	EN 1848-2
Linearity of edges	mm	≤ 30	EN 1848-2
Tensile strength	N/5cm	≥ 1100	EN 12311-2 Method A
Tear strength	N	≥ 200	EN 12310-2 Trapezoid
Elongation	%	Between 15 and 30	EN 12311-2 Method A
De lamination resistance	N/50mm	≥ 100	EN 12316-2
Dimensional stability	%	≤ 0.5	EN 1107-2
Hot air Welding strength	N/50mm	≥ 100	EN 12316-2
Slip Resistance		≥24° (31°) level C ≥45° level 3	EN 13451-1 ANNEX E EN 16165 pendulum (UNE41901)
Supper chlorination Resistance	Change of color, gray scale	≥ 3	NF T 54-803-2 Appendix C 20ppm
UV Artificial weathering resistance 6000h	Change of color Cracks	≥ 3 grey scale No crazing / cracks	EN 20105 A02 ISO 4892-2:2006 Method A cycle 1
Resistance to micro-organism soil burial		Δm/m ≤ 5% (std.) Δm/m ≤ 1% (Supper.)	ISO 846:1997 Method D
Resistance to Bacteria		No stains	ISO 846:1997 Method C
Cold bending	°C	≤ -25°	EN 495-5
Abrasion resistance	No print change	100 cycles	EN ISO 5470-1:1999 5N weight 60 tr/min

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Resistance to oxidizing agents	Change of color	Grey scale ≥ 3.5	Super chlorination 20ppm
CaCO ₃ evaluation level	%	≤ 3	NF EN 14902:2005 App A

Acrylic coating quality – Staining resistance:

Description	Contact time	Requirements	Results		Test Method
			Before abrasion	after abrasion	
Sunflower oil + 10% carbon black paste	24h	Degree ≥ 4 (superior)	5	5	Deterioration evaluation according to NF T 54-803-2 Appendix D
Distilled water +2 % iodine	10 min	Degree ≥ 2 (standard)	5	5	
Marker blue	10 min		5	5	
Yellow mustard	16h		4	4	
Sunflower oil +1% eosin Y	10 min		5	5	
Distilled water +0/1% methylene blue	16h		5	5	
Sunflower oil +1% solvent red 27	10 min		4	4	