



DELTAShield AQUALINE AL

ONE PRODUCT, ONE APPLICATION, ALIPHATIC, FLEXIBLE AND SEAMLESS WATERPROOFING MEMBRANE

DESCRIPTION

AQUALINE AL is a two component, spray applied, instant curing, high performance elastomeric waterproof membrane that can be built to any thickness in one application. It is ideal for swimming pools, lagoons and water bodies where the requirement of color stability is required in an elastomeric coating.

AQUALINE AL is UV and colour stable, suitable for pedestrian and vehicular traffic and can be installed with slip resistant surface profile options.

AQUALINE AL is specifically formulated for applications where the highest physical performance is required along with colour fastness to ensure functionality and aesthetics.

SPECIFICALLY FORMULATED AS:

- ✓ A single product, one application, UV and colour stable, seamless waterproof membrane for pools, resort lagoons artificial beaches and all marine applications.

FEATURES

- ✓ Extremely fast spray applied installation speed.
- ✓ Instant curing – touch dry in 20 seconds.
- ✓ Two component, high performance membrane.
- ✓ Completely seamless, even across multiple substrates.
- ✓ Excellent adhesion to most common construction materials, concrete, render, steel, aluminium, concrete blocks.
- ✓ Resistant to most standard chemicals, salts acids, alkalis and fuel oils.
- ✓ Designed for extreme climates.
- ✓ 100% solids, VOC and solvent free.
- ✓ Very high impact resistance.
- ✓ Excellent crack bridging properties.
- ✓ Highly flexible, excellent elongation at break.
- ✓ High bond strength to suitably prepared substrates.
- ✓ Thermally stable, even at extreme temperatures.
- ✓ High tensile strength.
- ✓ No top coat required.



PRODUCT INFORMATION

PROCESSING PROPERTIES	DATA
Mixing ratio of Comp. A to Comp. B	1: 1 by volume
Dry film thickness range [mm] <small>(For project specific DFT recommendations consult with manufacturer)</small>	Steel Minimum: 1 Maximum: indefinite Concrete Minimum: 2 Maximum: indefinite
Tack Free-Time at 20°C [sec.]	10 - 20
Over coat cycle [h]	0 – 12 (without any pre-treatment)
Curing/loading after [h]	Walkable: 1 Mechanical: 2 Chemical: 12 - 24
Temperature range for application (ambient) [°C]	-10 - +50° C
Temperature range for application (substrate) [°C]	-10 - +50° C
Material Temperature (Preconditioning) [°C]	25 - 30° C
Material Temperature (Spraying) [°C]	65 - 75° C
Maximal relative air humidity for application [%]	98%
Pay attention to the dew point limit	Substrate should be 3C greater than DP (dew point)

PHYSICAL PROPERTIES	DATA
VOC-content	DIN EN ISO 11890-1 / ASTM D-1259 0%
Solid content	DIN EN 827 / ASTM D-2697 100%
Viscosity [mPa*s] @ 25°C	DIN EN ISO 2884-2 / ASTM D-4878 Comp. A: 600 - 1.000 Comp B: 500 – 900
Density [g/cm³] @ 20°C	DIN EN ISO 2811-1 / ASTM D-1217 Comp. A: 1,09 ± 1,13 Comp. B: 1,00 ± 1,04
Density [g/cm³]	EN ISO 1183 / ASTM D-792 1,01 ± 1,05
Tensile strength [MPa]	ISO 37-2005 / ASTM D-638 ≥ 22
Modul [MPa]	IISO 37-2005 / ASTM D-638 100% Elongation: ≥ 10 300% Elongation: 20
Elongation at break [%]	ISO 37-2005 / ASTM D-638 ≥ 350 - 400
Hardness [Shore D]	ISO 868-2003 / ASTM D-2240 45 ± 5



PHYSICAL PROPERTIES	DATA	
Rebound resilience [%]	ISO 4662 / ASTM	≥ 32
Tear growth resistance[N/mm]	ISO 34-1 method A	≥ 45
Volume abrasion [mm ³]	DIN ISO 4649	≤ 130
Taber Abrasion [mg]	ASTM D-4060	< 6 (Wheel CS17 / 1.000g / 1000 Cycles) < 125 (Wheel H18 / 1.000g / 1000 Cycles)
Pull off strength [N/mm ²]	DIN EN ISO 4624 / ASTM D-4541	Concrete: ≥ 1,5 Steel: ≥ 6
Water vapor transmission rate [g/m ² *d]	ISO 15106-3	6,1 (at 23° C a. 85% relative humidity) 17,5 (at 38° C a. 90% relative humidity)
Permeation coefficient [g*mm/m ² *d]	ISO 15106-3	17,3 (at 23° C a. 85% relative humidity) 51,0 (at 38° C a. 90% relative humidity)
Methane transmission rate [cm ³ /m ² *d*bar]	ISO 15105-1	91,5 (at 23° C a. 0% relative humidity)
Resistance to Root Penetration	EN 14416	Passed
Crack bridging abilities [mm] (thickness of the sample 2-3 mm)	DIN EN 1062-7 Procedure C.2	+23° C: > 15,5 -10° C : > 6,8 -20° C : > 6,4
Coefficient of sliding friction	DIN 51131	Dry (leather): 0,78 Wet (SBR-rubber): 0,04
Sound absorption	-	Approx. 5 dB / mm DFT
Storage conditions [°C]	DIN EN 12701	10 – 30 (in closed original drums, stored at dry and well-ventilated place; beware of freezing)
Shelf life	-	Approximately 12 months unopened and stored correctly



APPLICATION NOTES

- **DELTAshield AQUALINE AL** should be applied in strict accordance with project specific application methodologies recommended by the manufacturer.
- **DELTAshield AQUALINE AL** can only be applied using high pressure heated plural component spray equipment by trained and approved applicators.
- Substrates should be cleaned and prepared prior to the application of **AQUALINE AL**, in accordance with the manufacturers written specifications.
- In ambient temperatures below 15°C chemical drums should be pre-heated using band heaters to 30 – 40°C.
- The B-side component should be thoroughly power stirred prior to the commencement of spraying and periodically during the spraying process to ensure there is no settling out of the B-side chemical components.
- The Pigment is always mixed into the B-side using a power stirrer.
- Both the A-side and B-side drums should be fitted with desiccant dryers.
- Compressed air supply should be supplied via an air dryer.
- Primary heaters should be set at between 65 - 75°C. Adjustments can be made on-site based on environmental conditions, mixing module size and application circumstances.
- Hose heaters should be set at 70°C. Adjustments can be made on-site based on environmental conditions, mixing module size and application circumstances.

SAFETY AND HANDLING

- All applicators of **DELTAshield AQUALINE AL** should be trained and approved by the manufacturer.
- Spray applicators should wear appropriate PPE including approved breathing equipment, eye wear, Nylux or similar light weight spray suit and appropriate covered footwear.
- Avoid breathing in vapors during spraying or when handling chemicals.
- Avoid eye and skin contact.
- Store chemical drums in a cool dry environment. Avoid storing chemicals for long periods in direct sunlight.
- Do not store chemicals next to food stuffs.
- Ensure chemical drums are kept tightly sealed and avoid ingress of air and moisture.

TECHNICAL SERVICES

- Detailed technical assistance and further information regarding this system and its relevant application specifications are available from DELTA Technical Services.

PACKAGING

- **DELTAshield AQUALINE AL** is supplied in 40 or 475 kg sets.

All guidelines, recommendations, statements, and technical data contained herein are based on information and tests we believe to be reliable and correct, but accuracy and completeness of said tests are not guaranteed and are not to be construed as a warranty, either expressed or implied. It is the user's responsibility to satisfy himself, by his own investigations and testing, the suitability of the product for his own intended use, application and job situation and user assumes all risk and liability resulting from his use of the product. Due to the large number of variables that can affect the product and the application process that are out of the control of DELTA Coatings International LLC no warranty of any kind, express or implied is given. The liability of DELTA Coatings International LLC for any claims is limited to the purchase value of the material.

Version 190625