ACRIFLEX pH 4

Elastic fiber-reinforced liquid waterproofing membrane with high chemical resistance

Two-component, fiber-reinforced liquid waterproofing membrane, formulated with water-based acrylic resins and cement. It can be used also at low temperatures. Resistant to water stagnation, critical pH values, low temperatures and continuous freeze-thaw cycles. Suitable to waterproof tanks containing extremely acidic or basic substances.

BENEFITS

- Resistant to pH levels between 2 and 12.
- It can be left in direct contact with acid or basic substances.
- · Easy and quick application.
- · High tensile strength.
- · Excellent elasticity.
- It allows to waterproof applying low thickness layers.
- · Water-based product, solvent free.

APPLICATION FIELDS

Product designed for the waterproofing of tanks that contain liquids with basic or acidic values of pH, and for the protection of supports in direct contact with high corrosive substances.

Acriflex pH 4 can be use indoor or outdoor.

YIELD

Total yield: 2,5 kg/m² (0.51 lb/ft²) in 2 coats.

COLOUR

Grey.

STORAGE

Store the product in well ventilated areas, away from sunlight and ice, at temperatures between +5°C (+41°F) and +35°C (+95°F).

Storage time: 12 months.

PACKAGING

Part A – 13 kg (28.66 lb) plastic bucket.

Part B - 12 kg (26.46 lb) plastic bag.

Pallet: part A - 48 buckets (624 kg - 1375.68 lb).

Pallet: part B - 48 bags (576 kg - 1269.86 lb).

SUPPORT PREPARATION

The support must be completely hardened, dry and resistant enough. The surface must be thoroughly clean, well consolidated, without detaching parts and perfectly levelled.

Before product application, it is recommended to cover any elements that will not be treated.

Eventual loose parts must be restored before applying the product.

CONCRETE

Restore damaged and crumbly concrete with *Rebuild*⁴⁰ *R4* (see technical data sheet).

Use *Grip Primer* (see data sheet) on smooth concrete if the surface is not wet.

If the support is wet or there is damp, use *WATstop* as a primer (see data sheet).



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Products and systems for the protection and restoration of concrete structures – Part 2 : Systems to protect concrete surfaces

Vapour permeability value:

 $\mu = 1736$





For application videos, product page, safety data sheets and other information.

Waterproofing - Liquid





Technical Data					
Features		Units			
Yield	2.5	kg/m ²			
	0.51	lb/ft ²			
Aspect	semi dense	-			
Colour	grey	-			
Mixing water	if necessary, max 10%	-			
Pot life at +20°C (+68°F), R.H. 40%	20 - 30	hours			
Waiting time between 1 st and 2 nd coat (T=+20°C / +68°F; R.H. 40%)	4	hours			
Application temperature	+5 /+35	°C			
	+41/+95	°F			
Drying time (T=+20°C / +68°F;U.R. 40%)	4	hours			
Storage	12 months in original containers and in dry areas	months			
Packaging	Part A – plastic bucket = 13 kg (28.66 lb)	kg / lb			
	part B – plastic bag =				
	12 kg (26.46 lb)				

Final performances		Units	Regulations	Result
Waterproofing with positive pressure	9.5 9.5 139.61	atm bar psi	EN 12390-8	waterproof
Break Elongation	87%	-	-	elastic
Crack bridging ability	2.0 0.079	mm in	-	resistant
Accelerated weathering test	1680 (>10 years*)	hours	-	resistant
Resistance after 50 freeze-thaw cycles (-15°C/+5°C)	-	-	EN 202	unchanged
Cold flexibility	- 20 - 4	°C °F	-	flexible
Punching resistance	7 68.7 15.44	kg N Ibf	ASTM D4833	-
Chemical resistance to values of pH between 2 and 12	-	-	-	resistant
Adhesion test on surfaces with WATstop applied over (Pull Off Adhesion Test)	650 20.21	N/m lbf / ft	ANSI N5.12 ASTM D 454 ISO 4624	excellent
Acid resistance (contact with HCl for 20 days - pH=2,86)	corrosion 0.19%	-	-	good resistance

Waterproofing - Liquid

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Final performances		Units	Regulations	Result
Base resistance (contact with NaOH for 20 days - pH=13,2)	corrosion 0.26%	-	-	good resistance
Vapour permeability value	μ = 1736	-	EN ISO 7783	-

^{* 1680} hours of weathering test is equal to about 10 years. This equivalence is merely indicative and it may vary depending on weather conditions. The above data, even if carried out according to regulated tests are indicative and they may be change when specific site conditions vary.

Cement screed

Onto screed in contact with the ground, apply *WATstop* as vapour barrier (see technical data sheet) and then *Acriflex pH4*.

Smooth surfaces

Over extremely smooth and non-absorbent surfaces apply *Grip Primer* (see technical data sheet).

For all not mentioned substrates in this technical data sheet, please contact Diasen Technical Dept.

MIXING

According to the water absorption of the substrate and weather condition, it is recommended to measure the right water quantity to have the right application and adhesion. The quantity of water is merely indicative.

During warm periods, if necessary, dilute the product with at max 10% of clean water. Add water directly on part A before mixing with part B, to allow the product to penetrate well into the screed. Mix well the two components (A+B) to obtain a homogeneous mixture, without clots. Use a high speed professional mixing drill. Do not add anything else to the mixture.

APPLICATION

- **1.** Seal dilatation joints if present with *Diaseal Strong*.
- Protect and waterproof the vertical joints using Safety Joint Roll (see technical data sheet) soaked with Acriflex pH 4, applied by brush creating a tank effect.
- **3.** Over cracks or irregular points (eg. connection points between different materials), use the armor *Polites TNT* (see data sheet).
- 4. Apply a first coat of Acriflex pH 4 by short hair roll, water squeegee or airless. In case of rain on a non perfect dry product, carefully check the suitability of the next covering.

5. Once the first coat is dry, apply a second coat of *Acriflex pH 4* taking care to completely cover the surface.

DRYING TIME

At +20°C (+68°F) and 40% of relative humidity level, the product drying time is 4 hours.

• Drying time is influenced by relative humidity level and by temperature and may change significantly. If applied with higher yield than expected, the drying time may increase significantly.

SUGGESTIONS

- Do not apply at room and substrate temperatures lower than +5°C/+41°F or higher than +35°C/+95°F.
- During summer season apply the product in the cooler hours of the day.
- Do not apply with imminent threat of rainwater or ice, in case of strong fog or relative humidity level higher than 70%.
- It is very important to made regular expansion joints on the screed to avoid cracks in the coating.

CLEANING

Wash tools with water before product hardening.

SAFFTY

For the handling, use individual protective devices and follow the instructions in the product safety sheet.













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