



Technical Data Sheets

 **AlkorPlan** 2000[®]

The Perfect Skin for Your Pool.



a Passion for Progress[®]



Application Water retaining membrane for swimming pools.

Product Description Membrane consisting of two layers of calendered flexible polyvinyl chloride (PVC-P) strengthened with polyester mesh reinforcement.

A. The face layer is a PVC sheet with the following component parts:

- a low-volatility plasticiser.
- a high performance stabiliser effective against high temperatures.
- high level UV stabiliser and colour pigments providing excellent light and temperature stability.

B. The reverse layer is a PVC sheet designed to encompass the most recent technology, specifically to protect against its environment with the following components:

- the same low-volatility plasticiser as the face sheet.
- a high performance stabiliser.
- most importantly a powerful fungicide to prevent degradation from micro-organisms.

C. Alkorplan 2000® membranes are protected on the face layer by a unique lacquer.

- The lacquer has a high level of UV absorbents, providing excellent protection against degradation from sunlight, bad weather, etc.
- The lacquer also creates a barrier against plasticiser loss through solubility in the pool water and attack from micro-organisms.
- The barrier properties of the lacquer also provide resistance to staining from suntan oils, calcium deposits, organic materials and micro-organisms.

Alkorplan 2000® membranes, Type 35216 and Type 35217, are produced to conform to the technical specifications laid down in the standard NF 5 54-803-2.

Properties • Sensitive to solvents: chlorinated solvents (trichloroethylene, perchloroethylene), tetrahydrofurane (THF), ketones (e.g. acetone, nail varnish remover), ethyl acetate, etc. (this list is open-ended) and abrasive products can destroy the varnish and primer.

- Resistant to normal water purification products and methods.
- Incompatible with bitumens, tars, oils, and polystyrene and polyurethane panels not protected by an anticontaminant film
- Sensitive to high concentration acids and bases
- Cadmium-free.

Use The membrane must be fitted to the pool structure according to the requirements of the Alkor Draka installation instructions. Joins in the sheets must be welded with hot air equipment and under no circumstances should solvent (THF) be used to weld seams, as solvent may destroy the lacquer and the printed designs.

Care & Maintenance The performance of Alkorplan 2000® membranes largely depends on the conditions of use, care and maintenance:

temperature, PH, disinfection method, friction, cleaning products, etc. To achieve the best possible results, please follow our care and maintenance instructions and those given by the manufacturers of water purification products.

Clean only by means of a mixture of ethanol/water (1/1) or soapy water. Care must be taken to avoid using certain cleaning products containing solvents or abrasive components which can destroy the lacquer and primer. Before any cleaning procedure, we recommend that a test be carried out on a sample.

Colours & Decorative Finishes

Type 35216		Type 35217	
Mid blue	(50001)	Byzance	(41161)
Ice blue	(52341)	Mosaic	(63604)
Aqua green	(60865)	Frieze Florentine	(00006)
White	(90057)	Carrara	(00134)
Sand	(91669)		
Grey	(PL891)		
Black	(99036)		

Packaging

In rolls on cardboard tubes.

Type	Thickness (mm)	Width (m)	Length of rolls (m)	Weight/m2 (kg)	Weight per roll (kg)
35216	1,5	1,65	25	±1,8	±75
35216	1,5	2,05	25	±1,8	± 95
35217	1,5	1,65	25	±1,8	±75

Storage & Transport

In a dry place, at a moderate temperature (max. 30 °C) and in the original packaging.

Physical Characteristics

Types 35216- 35217**	Standards	Units	Nominal values
Thickness	DIN 53353	mm	1,5
Density	DIN 53479	g/cm3	1,2
Ruopture strength	NFT 54102 DIN 53354	N/50 mm	1250
Elongation at break	NFT 54102 DIN 53354	%	18
Tear strength	NFT 54108 DIN 53363	N	280
Hardness	NFT 54109 DIN 53505	Shore A (10s)	77
Cold crack temperature	DIN 53361	°C	-25
Dimensional stabilitv 6h/80°C	NFT 54105 DIN 53377	%	-0.2
Ply adhesion	DIN 53357	N/50 mm	160
Light stabilitv*	DIN 53389	blue scale grey scale	7 4

* after 5.000 h XENOTEST (Cycle 17/3'-45 +/- 5°C)

Alkorplan® Non-slip Swimming Pool Lining



Application Embossed membrane for making non-slip areas (steps) in swimming pools.

Product Description Membrane calendered in two layers of flexible polyvinyl chloride (PVC-P), strengthened with a polyester fabric reinforcement:

A. The face layer is a PVC sheet with the following component parts:

- a low-volatility plasticiser.
- a high performance stabiliser effective against high temperatures.
- high level UV stabiliser and colour pigments providing excellent light and temperature stability.

B. The reverse layer is a PVC sheet designed to encompass the most recent technology, specifically to protect against its environment with the following components:

- the same low-volatility plasticiser as the face sheet.
- a high performance stabiliser.
- most importantly a powerful fungicide to prevent degradation from micro-organisms.

C. Non-slip Alkorplan 2000® membranes Type 81116 are embossed with a surface texture which achieves the highest 'C' classification when tested to the specifications required by DIN norm 51097.

Properties Resistant to normal water purification products and methods.

- Incompatible with bitumens, tars, oils, and polystyrene and polyurethane panels not protected by an anticontaminant film.
- Cadmium-free.

Use The membrane must be fitted to the pool structure according to the requirements of the Alkor Draka® installation instructions.

Care & Maintenance The performance of Alkorplan 2000® membranes largely depends on the conditions of use, care and maintenance : temperature, PH, disinfection method, friction, cleaning products, etc. To achieve the best possible results, please follow our care and maintenance instructions and those given by the manufacturers of water purification products.

Colours

Type 81116	
Mid blue	(50001)
Ice blue	(52341)
Aqua green	(60865)
Black	(99036)
White	(90057)
Sand	(91669)
Grey	(PL891)

Packaging

In rolls on cardboard tubes.

Type	Thickness (mm)	Width (m)	Length of rolls (m)	Weight/m2 (kg)	Weight per roll (kg)
81116	1,5	1,65	20	±1,8	±60

Storage & Transport

In a dry place, at a moderate temperature (max. 30 °C) and in the original packaging.

Physical Characteristics

Type 81116**	Standards	Units	Nominal values
Thickness	DIN 53353	mm	1,5
Density	DIN 53479	g/cm3	1,2
Rupture strength	NFT 54102 DIN 53354	N/50 mm	1250
Elongation at break	NFT 54102 DIN 53354	%	18
Tear strength	NFT 54108 DIN 53363	N	280
Hardness	NFT 54109 DIN 53505	Shore A (10s)	77
Cold crack temperature	DIN 53361	°C	-25
Dimensional stability 6h/80°C	NFT 54105 DIN 53377	%	-0.2
Ply adhesion	DIN 53357	N/50 mm	160
Light stability*	DIN 53389	blue scale grey scale	7 4

after 5.000 h XENOTEST (Cycle 17°/3'-45 +/- 5°C)

TYPE: 81116

Application To attach the Alkorplan 2000® lining to the walls of swimming pools.

Product Description 0.63 mm galvanised zinc steel sheet with an 0.8 mm Alkorplan® membrane laminated onto its surface. The steel face of the metal sheet is treated with an anti-corrosion coating.

Properties Hard-wearing lamination strength between steel sheet and the Alkorplan 2000® membrane.

Storage In a dry place, in the original packaging.

Packaging

Type	Thickness (mm)	Width (m)	Length (m)	Colour	Unit weight (kg)	Weight (kg/m ²)
81170	1,4	1,0	2,0	Mid blue grey	approx. 10,8	approx. 5,4

Use See chapter entitled "Installation Instructions" for Alkorplan 2000® waterproofing membranes.

TYPE: 81170

Application Reinforcement of welded joints, T borders and corners for Alkorplan® waterproofing membranes.

Product Description Solution of polyvinyl chloride (PVC) in tetrahydrofurane (THF).

- Properties**
- Viscous.
 - Volatile.
 - Low flash point.
 - Ignition point: -17 °C in a closed muffle.

Storage & Transport Follow the instructions relating to inflammable products, refer to the text on the label and take into consideration the data given on the safety sheet, which is available on request.

Packaging 1 litre metal box.

Type	Colour	
81029	grey	PL891
81032	ice blue	50001
81034	aqua green	60865
81035	white	90057
81037	transparent	00001
81039	mid blue	52341
81054	sand	91669
81055	black	99036

Use a) Installation instructions: see chapter entitled "Applying liquid PVC".

b) Health and safety: when using liquid PVC in an enclosed area, ensure that the area is well ventilated.

Wherever used, it is prohibited to smoke or produce flames. See safety sheet.

Consumption Approximately 1 kg/100 m.

TYPE: 81029/32/34/35/37/39/54/55

Application

One of the principal causes of the aesthetic problems associated with swimming pool liners is the presence of dissolved metal. The problems take the form of staining and discolouring which is very difficult, if not impossible, to remove. It is, therefore, important to remove the traces of dissolved metal before the staining appears. The patent anti-stain product **Alkorplus® 81059** offers a simple, safe, and effective system for reducing the presence of dissolved metal in swimming pool water.

Product Description

The anti-stain **Alkorplus® 81059** is a mineral product, concentrated to 30%. The product neutralises various metal ions such as copper, lead, tin, cadmium, silver,... (an ion: the form taken by a metal or metal salt when dissolved in water).

The presence of dissolved metal in swimming pool water may originate from:

- corroded pipes, pumps or heat exchangers.
- impurities in water treatment products*.
- partial or complete replacement of pool water with water containing metal salts (tap water for example may contain up to 0.2 ppm of copper).

* The presence of metal impurities in water treatment products can easily be tested: Pour 5 ml of the water treatment product in a glass (if the product to be tested has a solid form, dissolve 1gr into 5ml of water), add 3 drops of the anti-stain **Alkorplus® 81059**, mix the products for about 15 seconds and wait 10 minutes for reaction. If the water treatment product contains heavy metals, the white **Alkorplus® 81059** will turn grey. It is strongly advised to do the test in open air. If the product to be tested is strongly acid (e.g. anti-lime products, certain products for cleaning the water line), an unpleasant smell may be released.

Use

The product consists of small insoluble granules. In order to avoid dispersion of the product into the pool, it is advisable to pour it into the skimmer. In this way, the product forms an active layer in the filter. Dissolved metals are absorbed by the product and when cleaning or back-washing the filter they are removed from the water together with the product. This means that after every filter backwash, a fresh

dose of the product must be added. It is important that the circulation pump is operated regularly, to ensure that all the pool water is treated. The dosage is determined by the amount of dissolved metals present in the pool water.

The prescribed dose is:

- 40 ml (stopper volume) of the product per 50 m3 of water; weekly during the swimming pool season.

- 80 ml of the product per 50 m3 of water at the beginning of the swimming season or after every pool water replacement (even partial).

It is important to shake the product thoroughly before use.

Recommendation

The product is neither toxic, nor irritating. Under no circumstances should the product be mixed with an acid as it gives off an irritating and inflammable gas. This technique is not compatible with other disinfecting methods, that are based on the presence of dissolved metal in the pool water (such as copper sulphate and electrophysical systems). The treatment of pool water by means of the anti-stain **Alkorplus® 81059** is compatible with flocculating products based on aluminium salts.

Outside the swimming pool season, an anti-stain treatment with **Alkorplus® 81059** is not necessary, because the risk of the newly dissolved metals appearing is negligible, provided that the water treatment products do not contain metal impurities.

It is strongly advised not to put any chlorine tablets into the skimmer outside the swimming season or whenever the circulation pump is not regularly operating. Large concentrations of chlorine may build up and cause corrosion to the metal parts of the pump. This will also add to the presence of dissolved metals in the swimming pool water, which might cause the formation of stains on the membrane.

Treatment of Watertightness Supports

Application

In the area between the pool wall and there is a build up of humidity and heat. The presence in this area of organic matter creates a fertile breeding ground for micro-organisms. **Alkor Draka** recommends that the pool sub-structure is treated to prevent the growth of micro-organisms and fungi. It is essential that any treatment is compatible with the membrane and **Alkorplan®** now market a product that is ideal for this application: **Alkorplus® 81052** (Sanitized® P8103 from Sandoz).

Product Description

The Sanitized® 2.5% solution is stable for approximately 4 hours. Shake the solution well before applying.

- Dilute the 250 ml measure in 10 litres of water (2.5% solution).
- Apply the solution with a brush or roller (do not spray).
- The solution can treat about 75 m2 of surface area, depending on the porosity of the support.

Properties

- The surface to be treated must be clean and dry to ensure proper penetration of Sanitized®.

- Cracks must be cleaned and treated with a 2.5% Sanitized® solution before repair.
- For safety reasons, we recommend applying 2 to 3 layers, leaving 1 hour to dry in between.
- Before installing the liner, wait 12 to 24 hours, depending on the porosity of the support.

• **Masonry support** (new construction).
Treat twice with the 2.5% Sanitized® solution. Wait 1 hour before applying the 2nd layer. Then leave to dry overnight.

• **Wooden surface**
Thoroughly clean the surface before treatment. Strip old wood panelling beforehand, removing all traces of paint. Follow the same procedure as for masonry.

- **Renovating a swimming pool** Old polyester pools must be thoroughly cleaned before treatment.

Masonry or brickwork should first be disinfected with a 5% bleach solution. Apply 2 or 3 layers, leaving them to dry for 1 hour between each layer, and over night for the final layer.

Liquid Sanitized® P-8103 is compatible with most materials used for building swimming pools:

Compatibility

- polyvinyl chloride.
- polyester.
- polyethylene, polypropylene.
- polystyrene.

With polyurethane, it is advisable to carry out preliminary tests.

Like all chemical substances, Sanitized® P-8103 must be used with the usual care (rubber gloves, protective goggles, etc.).

Precautions

This product irritates eyes and skin. All contact with eyes and skin must be avoided and appropriate gloves and protective gear worn. If it does come into contact with the skin, it is important to wash the affected area in lukewarm water and soap. In the case of contact with the eyes, wash immediately and thoroughly with water. See a specialist. The safety sheet is available on request.



Field of Use Fixing Alkorplan® sheets on the walls and bottom of the pool and fixing of adhesive outline

Product Description Riveting of aluminium alloy (Au2b) equipped with stainless steel case Z3 CN 18.10 (305)

Properties

- Cut resistance: 370
- Tear resistance: 220

Storage No specific precautions necessary

Installation Follow the instructions for the installation of Alkorplan 2000®

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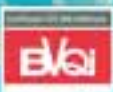
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