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# DESMOFLEX AQUA HIGH QUALITY POLYURETHANE WATER-BASED MEMBRANE



## **DESCRIPTION**

The **DESMOFLEX AQUA** is a high quality white, aliphatic, polyurethane water-based membrane of one component, suitable for long-term waterproofing. Its unique composition is designed to create a single, elastic, hydrophobic membrane that completely covers capillaries and cracks up to 2mm.

It offers high protection against humidity (suitable for surfaces with stagnating waters) as well as very high protection against solar ultraviolet (UV) radiation and mechanical stressing. After application, the surface remains walkable and resistant to stagnating waters, maintaining high whiteness over time.

## FIELDS OF APPLICATION

**DESMOFLEX AQUA** is suitable for long term waterproofing of roofs, terraces, balconies and asphalt felts, EPDM or PVC membrane.

Waterproofing of horizontal surfaces from concrete, cement mortars etc., especially for surfaces with stagnating waters.

# **ADVANTAGES - CHARACTERISTICS**

- Perfect waterproofing, resistance to stagnating waters, high performance, elasticity and walkability.
- Resistant to humidity and ultraviolet radiation.
- Suitable for cracks up to 2mm.
- Guaranteed long-term protection of the substrate.
- User-friendly, it neither peels off nor contributes to the development of fungi and maintains its properties at temperatures between -15°C and +80°C.
- It reflects solar radiation and offers lower temperatures in the summer.

- Economical solution and perfect results.
- High mechanical strength.
- It is applied easily and offers a smooth and snow-white surface. It never fades and prevents dust and dirt from staying on the surface. No holes are created on the surface during the maturation of the material.
- It can be applied even on cloudy days because the final polymerization of the material is carried out through evaporation, thus cloudy conditions are also favourable.

#### SUBSTRATE PREPARATIONS

The substrate should be steady and all loose materials should have been removed. Wash the substrate with plenty of water under pressure in order to remove any remains, such as dust, oil and grease. Remove also all stagnating waters. In case the concrete is decayed or there are cracks wider than 1,5 mm, the defects should

first be repaired and the cracks filled with one of **THRAKON** repairing materials depending on the case. Before the application of the material the substrate should be treated with water-based **DESMOFLEX EPOXY PRIMER** or with **GLX 292 FLEX PRIM** acrylic primer. The substrate should be completely dry before application.

#### **APPLICATION**

Effective waterproofing requires two crosswise layers. For brush, roller or airless sprayer application, dilute with 5% water for the first layer. Apply the second layer after the first has completely dried (24 hours). For two days after the application, the surfaces should remain dry. When the substrate is severely cracked the product

should be applied in at least three layers and it should be reinforced with **THRAKON FABRIC**. Application is not recommended when temperatures fall below +10°C or rise above +40°C, when the relative atmospheric humidity is >80% or when the surface humidity is >4%. **DESMOFLEX AQUA** takes the form of a membrane 7 days after application.





# **PACKAGING - STORAGE**

## **APPLICATION RATE**

The DESMOFLEX AQUA is supplied to pails of 4kg and 12kg. The pails must be stored, tightly closed, in dry and cool rooms for up to 36 months from production date, provide that the product has not been diluted.

1.0-1.2 Kg/m<sup>2</sup> for 2 layers

#### **PRECAUTIONS**

#### **CLEANING OF TOOLS – STAINS**

For information about safe use, storage and disposal of the product, read the information on the label and in the most recent MSDS of the product, which is available upon request to professionals. The remains of the paints should not be disposed of together with domestic waste. Ask for advice from the local government with regard to the disposal and removal of waste.

Poisoning Centre Tel. No.: 210 77.93.777

Immediately after use, drain the material into the container and clean all the tools with hot water and soap. Do not pour the washing liquids on the ground. The matured material can be only removed through mechanical means.

TECHNICAL CHARACTERISTICS	UNITS	STANDARD	VALUE
Appearance/Colour			Thick liquid/white
Density	(kg/l)	$(20^{0}C)$	$1.44 \pm 0.03$
Application Rate -2 layers	(Kg/m <sup>2</sup> )		1.0-1.2
Touch Dry (+23°C)	(h)		1-2
PH	(mm)	(ISO 1148)	8-9
Recoating (+23°C)	(h)		24
Elongation during Breakage	(%)	(ASTM D 412-06a)	$600 \pm 100$
Adhesive Strength	(N/mm <sup>2</sup> )	(EN 1542:2001)	$2.4 \pm 0.2$
Spectral reflectance (SR)	(%)	(ASTM E903-12 and ASTM G159-98)	86
Solar Reflectance Index (SRI)		(ASTM E1980-11)	106
Hardness Shore A		(ASTM D2240)	65 ± 5
Operating Temperatures	(°C)		-15 to +80
Tensile Strength	(MPa)	(ASTM D 412-06a)	$7.25 \pm 0.25$
Maturations time-final properties	(d)		7
Application temperature	(°C)		5-35

Note: The measurements were taken in laboratory environment under a temperature of +23°C, Relative Humidity 50 % and without ventilation. They may vary depending on the conditions prevailing at the worksite, such as temperature, humidity, ventilation and absorbability of the substrate and the tile.

The technical information and guidelines in this brochure related to the application and end-use of THRAKON products are based on the Company's current expertise and experience on the products and are given in good faith provided they are properly stored, used and applied in accordance with the guidelines given by THRAKON. Given that we are unable to directly inspect the conditions that prevail at the worksite as well as the application of the product, the Company shall not provide any guarantee regarding the suitability of its products for any particular purpose and disclaims any legal responsibility that is based on written information in this brochure or on written or or otherwise provided recommendations and guidelines. By applying the product on a small surface, the users are advised to test the product's suitability for the intended application and purpose. THRAKON reserves the right to amend the properties of its products without prior notice. All orders are accepted only after acceptance of the above and under the Company's respective Trade Policy terms. This version of the technical data sheet automatically cancels any previous version.