

# MARITRANS®

## Transparent, Liquid-Applied Polyurethane Waterproofing Membrane

### Product Description

MARITRANS® is a transparent, hard-elastic, one component, aliphatic polyurethane, high-solids coating, used for long-lasting waterproofing.

MARITRANS® is using a unique curing system (moisture triggered), and unlike other similar systems it does not react with moisture (moisture-cured) and does not form bubbles.

### Uses

- Waterproofing of balconies and terraces.
- Waterproofing of glass and metal-mesh reinforced glass.
- Waterproofing of glass-brick walls.
- Waterproofing and protection of natural stones.
- Waterproofing of transparent plastics (e.g. GFK, Polycarbonate).
- Waterproofing and protection of wood and bamboo.
- Waterproofing of metal surfaces.

### Packaging

MARITRANS® is supplied in 20 kg, 10 kg, 5 kg and 1 kg pails.

### Consumption

0,8 -1,2 kg/m<sup>2</sup> in two or three layers.

This coverage is based on practical application by roller onto a smooth surface in optimum conditions. Factors like surface porosity, temperature, humidity, application method and finish required can alter consumption.

### Advantages

- Simple application (roller or airless spray).
- UV-stable.
- Non-yellowing.
- When applied forms seamless membrane without joints or leak possibilities.
- Water resistant.
- Maintains its mechanical properties over a temperature span of -30°C to +90°C.
- Frost resistant.
- Full surface adherence.
- The waterproofed surface can be walked on.
- Alkali and chemical resistance. Even after years it preserves the transparency and elasticity.
- Protects mineral surfaces against frost, steam and acid rain.
- Gives a more transparent view at aging and oxidized plastic surfaces.
- Water allows the isolation of the damaged glass surfaces and at breaking case it prevents fragmentation of the glass.

### Technical Data

<b>Composition</b>	Polyurethane high-solids pre-polymer	
<b>Elongation at break</b>	322%	DIN EN ISO 527
<b>Tensile Strength</b>	25.4 N/mm <sup>2</sup>	DIN EN ISO 527
<b>E-modulus</b>	69.5 N/mm <sup>2</sup>	DIN EN ISO 527
<b>Tear Resistance</b>	56.9 N/mm	DIN ISO 34, Method B
<b>Elongation at break after 2000h of accelerated aging (DIN EN ISO 4892-3, 400 MJ/m<sup>2</sup>)</b>	298%	DIN EN ISO 527
<b>Tensile strength after 2000h of accelerated aging (DIN EN ISO 4892-3, 400 MJ/m<sup>2</sup>)</b>	25.5 N/mm <sup>2</sup>	DIN EN ISO 527
<b>Gloss retention after 2000h of accelerated aging (DIN EN ISO 4892-3, 400 MJ/m<sup>2</sup>)</b>	Good	DIN 67530
<b>Surface chalking after 2000h of accelerated aging (DIN EN ISO 4892-3, 400 MJ/m<sup>2</sup>)</b>	No chalking observed.	DIN EN ISO 4628-6
<b>Hardness (Shore D scale)</b>	25	ASTM D 2240
<b>Water Vapor Permeability</b>	8.05 gr/m <sup>2</sup> - 24 hour	EN ISO 12572
<b>Resistance to Water Pressure</b>	No leak (1m water column, 24 h)	DIN EN 1928
<b>Adhesion to Absorbent Ceramic Tile</b>	>2,0 N/mm <sup>2</sup> (ceramic tile failure)	ASTM D 903
<b>Hydrolysis (5% KOH, 7 days cycle)</b>	No significant elastomeric change	Inhouse Lab
<b>Service Temperature</b>	-40 °C - +90 °C	Inhouse Lab

Our technical advice for use, whether verbal, written or in tests, is given in good faith and reflect the current level of knowledge and experience with our products. When using our products, a detailed object-related and qualified inspection is required in each individual case in order to determine whether the product and /or application technology in question meets the specific requirements and purposes. We are liable only for our products being free from faults; correct application of our products therefore falls entirely within your scope of liability and responsibility. We will, of course, provide products of consistent quality within the scope of our General Conditions of Sale and Delivery. Users are responsible for complying with local legislation and for obtaining any required approvals or authorizations. Values in this technical data sheet are given as examples and may not be regarded as specifications. For product specifications contact our R+D department. The new edition of the technical data sheet supersedes the previous technical information and renders it invalid. It is therefore necessary that you always have to hand the current code of practice.

<b>Tack Free Time</b>	6-8 hours	Conditions 20°C, 50 °C RH
<b>Light Pedestrian Traffic Time</b>	24 hours	Inhouse Lab
<b>Final Curing Time</b>	7 days	Inhouse Lab
<b>Chemical Properties</b>	Good resistance against detergents, seawater and oils.	

## Application

### Surface Preparation

The surface needs to be clean, dry and sound, free of any contamination, which may harmfully affect the adhesion of the membrane. Old coatings, dirt, fats, oils, organic substances and dust need to be removed. Possible surface irregularities need to be smoothed. Any loose pieces and dust need to be thoroughly removed.

WARNING: Do not wash the surface with water.

ATTENTION: Surfaces with trapped moisture (e.g. trapped moisture under balconies tiles) must be left to dry completely (max. 5% moisture), before the application of the MARITRANS<sup>®</sup> coating.

WARNING: Do not apply the MARITRANS<sup>®</sup> on ceramic surfaces with ascending nitric salts in the joints, without suitable pre-treatment.

WARNING: Do not apply the MARITRANS<sup>®</sup> on surfaces treated in the past with active silane, siloxane, silicon or other water-repellents, because of expected poor adhesion. We recommend an adhesion test, if circumstances and surface history are not clear.

### Priming

Prime (activate) non-absorbent glazed surfaces, like glazed ceramic tiles, glass and glass bricks with MARITRANS<sup>®</sup> TILE-PRIMER.

Apply the MARITRANS<sup>®</sup> TILE-PRIMER by soaking a clean and dry cloth, and wipe the entire surface off. By this application procedure, you ensure that besides the chemical activation (priming) of the surface, the surface is getting also very effectively degreased. Change cloths often. Make sure that enough quantity of MARITRANS<sup>®</sup> TILE-PRIMER is applied on the entire surface to primed and make sure that you do not leave any untreated spots.

### Transparent Waterproofing Membrane

Apply the MARITRANS<sup>®</sup> coating onto the primed surface and lay it out by roller or by suitable teeth trowel, until all surface is covered. After 12 hours - but not later than 18 hours – apply a second layer of the MARITRANS<sup>®</sup> coating, by using roller or brush.

For better waterproofing and wear resistance results, apply a third layer of the MARITRANS<sup>®</sup> coating.

ATTENTION: Do not apply the MARITRANS<sup>®</sup> over 1mm thickness (dry film) per layer. For best results, the temperature during application and cure should be between 5°C and 35°C. Low temperatures retard cure while high temperature speed up curing. High humidity may affect the final finish.

### Storage

Pails should be stored in dry and cool rooms for up to 9 months. Protect the material against moisture and direct sunlight. Storage temperature: 5°-30°C. Products should remain in their original, unopened containers, bearing the manufacturers name, product designation, batch number and application precaution labels.

### Safety Measures

MARITRANS<sup>®</sup> contains isocyanates. Keep away from ignition sources. Keep away from smoke. Hands and eyes must be protected with gloves and protective glasses. Case of eye contact, rinse eyes with plenty of water for the material and consult a doctor immediately. Adequate ventilation is required during the application.

**NOTE:** Keep out of reach of children. Please study the Safety Data sheet.

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