

# MARIFAST® 570

Liquid-applied Modified Polyurea Waterproofing Membrane

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## **Product Description**

MARIFAST® 570 is a premium, cold applied two-component brushable polyurea used for long-lasting waterproofing. It provides a quick drying time, allowing most projects to be completed within one day. It does not require special application equipment and forms a blister-free non-penetrating against moisture film with zero water absorption.

MARIFAST® 570 is based on elastomeric hydrophobic resins, which result in excellent mechanical, chemical, thermal, and natural element resistance properties.

Application of top-coat (MARISEAL® 400 or MARISEAL® 420) for UV protection is mandatory.

#### Product Information

Two-component, cold applied modified polyurea

#### Packaging

• 2:4 / 4:8kg metal pails

#### Color

- Transparent and grey,
- other colors available upon request

#### Shelf Life

• 12 months from date of production

#### Storage Conditions

Pails should be stored in dry and cool rooms.
 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

#### Advantages

- Simple application (roller, trowel)
- When applied forms seamless membrane without joints.
- Resistant to water
- Resistant to frost
- Crack-bridging up to 2mm, even at -10°C
- Provides water vapor permeability, so the surface can breathe
- Provides excellent thermal resistance, it never turns soft
- Waterproofs old bitumen-, asphalt felts by covering them, without the need to remove them prior to application
- Maintains its mechanical properties over a temperature span of -30°C to +90°C
- Provides excellent adhesion to almost any type of surface.
- The waterproofed surface can be used for domestic and public pedestrian and vehicular traffic
- Resistant to detergents, oils, seawater and domestic chemicals
- Even if the membrane gets mechanically damaged, it can be easily repaired locally within minutes





#### Uses

- Waterproofing of Roofs
- Waterproofing of Balconies, Terraces and Verandas
- Waterproofing of Pedestrian and Vehicular Traffic Decks
- Waterproofing of old Bitumen felts, Asphalt felts, EPDM and PVC membranes and old Acrylic coatings.
- Protection of Polyurethane Foam Insulation

Requires covering with suitable top-coat when applied in exposed surfaces.

### Consumption

• 1.2 - 2.2 kg/m² applied in two or three layers. This coverage is based on application by roller onto a smooth surface in optimum conditions. Factors like surface porosity, temperature and application method can alter consumption.

#### Certifications



EN1504-2: Surface protection product for concrete (2.2kg/m²)



PROPERTY RESULTS TEST METHOD  Elongation at Break > 650 % ASTM D 412	
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45.11/	
Tensile Strength > 15 N/ mm <sup>2</sup> ASTM D 412	
Water Vapor Permeability (1.2kg/m²) > 11 gr/m²/day ISO 7783	
Resistance to Water Pressure No Leak (1m water column, 24h) DIN EN 1928	
Carbon Dioxide Permeabily (1.2kg/m²) 1.7 gr/m2/day EN 1062-6	
<b>Water Permeablly (1.2kg/m²)</b> 0.01 kg/m²/h <sup>0.5</sup> EN 1062-6	
Adhesion to concrete 1.9 N/mm <sup>2</sup> EN 1542	
Crack Bridging Capability up to 2 mm crack (reinforced) EOTA TR-008	
<b>Hardness (Shore A Scale)</b> 65-70 ASTM D 2240 (15")	
Hydrolysis (5% KOH, 7days cycle) No significant elastomeric change Inhouse Lab	
Service Temperature -30°C to +90°C Inhouse Lab	
Shock Temperature (15min) 200°C Inhouse Lab	
Pot life15minConditions: 20°C, 50	)% RH
Rain Stability Time 3-4 hours Conditions: 20°C, 50°C	)% RH
Light Pedestrian Traffic Time6 hoursConditions: 20°C, 50	)% RH
Final Curing time 2 days Conditions: 20°C, 50	)% RH
Chemical Properties Good resistance against acidic and alkali	
solutions (5%), detergents, seawater and oils.	











## Application

#### Surface Preparation

Careful surface preparation is essential for optimum finish and durability.

The surface needs to be clean, dry and sound, free of any contamination, which may harmfully affect the adhesion of the membrane. Maximum moisture content should not exceed 5%. Substrate compressive strength should be at least 25MPa, cohesive bond strength at least 1.5MPa. New concrete structures need to dry for at least 28 days. Old, loose coatings, dirt, fats, oils, organic substances and dust need to be removed by a grinding machine. Possible surface irregularities need to be smoothened. Any loose surface pieces and grinding dust need to be thoroughly removed.

#### Repair of cracks and joints:

The careful sealing of existing cracks and joints before the application is extremely important for long lasting waterproofing results.

Clean concrete cracks and hairline cracks, of dust, residue or other contamination. Prime locally with MARISEAL® 710 Primer and allow 2-3 hours to dry. Fill all prepared cracks with MARIFLEX® PU 30 sealant. Then apply a layer of MARIFAST® 570, 200mm wide centered over all cracks and while wet, cover with a correct cut stripe of MARISEAL® Fabric. Press it to soak. Then saturate the MARISEAL® Fabric with enough MARIFAST® 570, until it is fully covered. Allow 6 hours to cure.

Clean concrete expansion joints and control joints of dust, residue or other contamination. Widen and deepen joints (cut open) if necessary. The prepared movement joint should have a depth of 10-15 mm. The width: depth ratio of the movement joint should be at a rate of approx. 2:1.

Apply some MARIFLEX® PU 30 Joint-Sealant on the bottom of the joint only. Then with a brush, apply a stripe layer of MARIFAST® 570, 200mm wide centered over and inside the joint. Place the MARISEAL® Fabric over the wet coating and with a suitable tool, press it deep inside the joint, until it is soaked and the joint is fully covered from the inside. Then fully saturate the fabric with enough MARIFAST® 570. Then place a polyethylene cord of the correct dimensions inside the joint and press it deep inside onto the saturated fabric. Fill the remaining free space of the joint with MARIFLEX® PU 30 sealant. Do not cover. Allow 12-18 hours to cure.

#### Priming

Prime very absorbent surfaces like concrete, cement screed or wood with MARISEAL® 710 or with MARIFAST® EP PRIMER. Allow the primer to cure according to its technical instruction

#### Waterproofing membrane

Before application, component B should be mixed properly in its individual container. Mix the two parts adding Part B to Part A under stirring (400rpm) for 2-3 minutes. Use MARISOLV®9000 in order to transfer all the quantity of component B into A. Dilute the mixture up to 5% with MARISOLV® 9000. Immediately after mixing spread all the material onto the surface and apply it homogenously using rubber squeegee, spatula or roller until all surface is covered. After 3-4 hours (not later than 24 hours) apply the top coat MARISEAL® 400 in one or two layers. At the time of top coat application the surface of MARIFAST® should be slightly tacky.

ATTENTION: Reinforce always with MARISEAL® Fabric at problem areas, like wall-floor connections, 90° angles, chimneys, pipes, waterspouts (siphon), etc. In order to do that, apply on the still wet MARIFAST® 570 a correct cut piece of MARISEAL® Fabric, press it to soak, and saturate again with enough MARIFAST® 570. For detailed application instructions with MARISEAL® Fabric, contact our technical department. We recommend reinforcement of the entire surface, with the MARISEAL® Fabric. Use 5-10cm stripe overlapping.

ATTENTION: For best results, the temperature during application and cure should be between 5°C and 35°C. Low temperatures retard cure while high temperature speeds up curing. High humidity may affect the final finish.

#### Finishing

Apply one or two layers of MARISEAL® 400 Top-Coat over MARIFAST® 570. The application of MARISEAL® 400 is mandatory. If a heavy duty, abrasion resistant surface is desired (e.g., Public Pedestrian Deck, etc), apply two layers of MARISEAL® 420 Top-Coat. For the several Top-Coats application procedures, please consult their technical instructions

WARNING: MARIFAST®570 is slippery when wet. In order to avoid slipperiness during wet days, sprinkle suitable aggregates onto the still wet coating to create an anti-slip surface. Please contact our technical Dept. for details.

## Safety measures

MARIFAST® 570 contains isocyanates. See information supplied by the manufacturer. Please study the Safety Data Sheet. **PROFESSIONAL USE ONLY** 

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 may guarantee only that our products are compliant with their technical specification; correct application of our products therefore falls entirely within your scope of liability and Users are responsible, in any case, for complying with local legislation and for obtaining any required approvals or authorizations, when necessary, either for their purchase and/or for their use. Values in this technical data sheet are given as examples and may not be regarded as specifications. For product specifications contact our technical 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

#### MARIS POLYMERS S.M.S.A.