



IZOBIL®

MARISEAL® 250 AQUA

Liquid-Applied , 100% Polyurethane Waterproofing Membrane

Product Description

MARISEAL® 250 AQUA is liquid-applied, highly permanent elastic, cold applied and cold curing, water based, one component, 100% polyurethane-based membrane used for long-lasting waterproofing.

PUD Technology™: The Green revolution in Polyurethane



MARISEAL® 250 AQUA is based on the innovation PUD Technology™ of MARIS POLYMERS SA, which enables, long-chain polyurethane macro molecules to be incorporated in a water medium, forming stable dispersions.

The PUD Technology™ based products, have the advantage that

they offer the high level properties of solvent based products, in an ecological, consumer and environmentally friendly, water-based, low VOC, no ADR transport product. The PUD Technology™ is the entry to the Green revolution in Polyurethane based products.

Uses

- Waterproofing of Rooftops
- Waterproofing of wet areas (under-tile) in bathrooms, balconies, kitchens etc.
- Protection of polyurethane foam insulation.
- Waterproofing of Balconies and Terraces.
- Waterproofing and protection of concrete constructions like bridge decks, tunnels etc.

Consumption

2,0 kg/m² consumption should be applied in two or three layers.

(In mesh application, you may need extra 500-700 gr consumption.)

Advantages

- Simple application(roller or airless spray)
- Water based
- When applied forms seamless membrane without joints.
- As it is pure polyurethane, it can continually contact with water.
- Provides high levels of crack bridging.
- Maintains its mechanical properties over a temperature span of -40°C to +90°C.
- Provides water vapor permeability.
- Full surface adherence without any additional anchoring.
- The waterproofed surface can be walked on.
- Even if the membrane gets damaged, it can be easily repaired locally within minutes.
- Low VOC content <100 g/l
- Low cost.
- The MARISEAL® 250 AQUA was awarded with the SINGAPORE GREEN LABEL certification.

Packaging and Colors

MARISEAL® 250 AQUA is supplied in white, grey and red in 20 kg.

Technical Data

PROPERTIES	RESULTS	TEST METHOD
Elongation at Break at 20°C	2000%	ASTM D 412
Tensile Strength 20°C	5 N/mm ²	ASTM D 412
E – Modulus at 20°C	1,5 N/ mm ²	ASTM D 412
Elongation at Break at -25°C	1900 %	ASTM D 412
Tensile Strength at - 25°C	4,2 N/ mm ²	ASTM D 412
E- modulus at - 25°C	1,3 N/ mm ²	ASTM D 412
Elongation at Break at 20°C	29,3 N/mm	ASTM D 412
E – Modulus at 20°C	5 N/mm ²	ASTM D 412
Elongation at Break at -25°C	4,2 N/ mm ²	ASTM D 412
Tensile Strength at - 25°C	2000%	ASTM D 412
E- modulus at - 25°C	1,3 N/ mm ²	ASTM D 412
Tear Resistance	29,3 N/mm	ASTM D 412
Water Vapor Permeability	>15 gr /m ² / day	ISO 9932:91
Resistance to Water Pressure	No Leak (1m water column, 24h)	DIN EN 1928
Adhesion to Primed Concrete	>1,5 N/ mm ²	ASTM D 903
Hardness (Shore A Scale)	60	ASTM D 2240
Light Pedestrian Traffic Time	18-24 hours	Conditions: 20 °C, 50% RH
Final Curing Time (ponding test)	10 days	
Density	1,22 gr/cm ³	
Surface Temperature	Min +10°C Max +40°C	
Ambient Temperature	Min +10°C Max +40°C	
Relative Air Humidity	Max %70-80	
Dew Point	Pay attention to the dew point! Dew point must be at least +3 °C in order to reduce the risk of condensation and blooming in finished surface and uncured coating surface temperature.	
Chemical Properties	Good resistance against acidic and alkali solutions (10%), detergents, seawater, 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. Maximum moisture content should not exceed 5%. 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.

Priming: Prime highly absorbent and brittle surfaces like concrete, cement screed, mortar, plaster, wood and non-absorbent surfaces like metal and ceramic tiles with MARISEAL AQUA PRIMER. Allow the primer cure according its instruction.

Waterproofing membrane: Stir well before using. Poor the MARISEAL 250 AQUA onto the primed surface and lay it out by roller or brush, until all surface is covered. After 18-36 hours (not later than 36 hours) apply another layer of the MARISEAL 250 AQUA. For better waterproofing results apply a third layer of the MARISEAL 250 AQUA.

NOTE: Do not apply the MARISEAL 250 AQUA over 0.5 mm thickness (dry film) per layer.

NOTE: Do not apply the MARISEAL 250 AQUA in negative (degC) temperatures or when rain or frost is imminent in the next 48 hours. For best results, the temperatures during application and cure should be between 5 °C and 35 °C.

Finishing: If a color stable, chalking-free, heavy duty, more abrasion resistant surface is desired (e.g. car parking), apply two layers of the MARISEAL 400 AQUA Top-Coat over the MARISEAL 250 AQUA.

WARNING: After 36-48 hours the material is applied, air temperature should be above 8°C , it should not be rainy or snowy and should be applied with considering the possibility of raining.

Storage

MARISEAL 250 AQUA pails should be stored in dry and cool rooms for up to 18 months. Protect the materials against moisture and direct sunlight. Storage temperature: 5 ° -30 °C.

Safety Measures

Keep away from children. Do not use empty containers for food storage.