Maris Polymers®
POLYURETHANE SYSTEMS

CONSTRUCTION

MARISEAL® 710 AQUA

TECHNICAL DATA SHEET
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Polyurethane Primer, Water-based

Product description

The MARISEAL® 710 AQUA is a water-based, transparent, semi-rigid, deep penetrating, one component, quick drying polyurethane primer.
The MARISEAL® 710 AQUA consists of flexible, water-based polyurethane resins (dispersion).

Used as a primer in waterproofing applications on absorbent surfaces in combination with the MARISEAL® AQUA SYSTEM .

The MARISEAL® 710 AQUA is based on the innovative **PUD-Technology™** of MARIS POLYMERS SA.

Advantages

- Simple application (roller or airless spray).
- Water Based
- Quick drying
- Deep penetrating
- Excellent anchoring to absorbent surfaces.
- Heat and frost resistant
- Stops the creation of dust.
- Maintains its mechanical properties over a temperature span of -30ºC to +80ºC.
- Low VOC content <100 gr/l

Uses

The MARISEAL® 710 AQUA is used as a primer for the water-based polyurethane waterproofing system on absorbent surfaces like:

- Concrete
- Mortar
- Plaster
- Wood, etc.

The MARISEAL® 710 AQUA can be used in combination with the MARISEAL AQUA SYSTEM (MARISEAL®250 AQUA, MARISEAL® 400 AQUA, etc.)

Consumption

0,2 kg/m^2 applied in one or two 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.

Colors

The MARISEAL® 710 AQUA is supplied milky-transparent.

PUD Technology™: The Green revolution in Polyurethane

The MARISEAL® 710 AQUA is based on the innovative **PUD Technology™** of MARIS POLYMERS, which enables, long-chain polyurethane macromolecules to be incorparated 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 evironmentally friendly, water-based, low VOC, no ADR transport product.
The **PUD Technology™** is the entry to the Green revolution in Polyurethane based products.

TÜVRheinland® CERT ISO 9001
TÜVRheinland® CERT ISO 14001

Technical data*

PROPERTY	RESULTS	TEST METHOD
Composition	Polyurethane pre-polymer dispersion.	
Adhesion to concrete	>1,5 N/mm^2	ASTM D 903
Hardness (SHORE A Scale)	>80	ASTM D 2240
Resistance to Water Pressure	No Leak (1m water column, 24h)	DIN EN 1928
Service Temperature	-30^{0}C to +90^{0}C	Inhouse lab
Water Vapor Permeability	>15 gr/m^2/day	ISO 9932:91
Tack free time	90 min	Conditions: 20ºC, 50% RH
Overcoating time	3-4 hours	
Final Curing time	10 days	

Application

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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 6%. 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.

WARNING: Do not use a metal-ball blasting machine to grind the surface, because the heavy metal-ball impacts destroy the cohesion of the concrete surface and lower its stability.

Priming

For best results, the temperature during application and cure should be between 5°C and 30°C. Low temperatures retard cure, while high temperature speed up curing. High humidity may affect the final finish.

Apply the MARISEAL® 710 AQUA by roller or brush, until the surface is covered. You can use airless spray allowing a considerable saving of manpower.
After 1-3 hours and while the primer is still a bit tacky, apply the water-based polyurethane coating.

RECOMMENDATION: If the surface is very brittle, like lightweight concrete or porous cement screed, apply two layers of the MARISEAL®710 AQUA.

Packaging

MARISEAL® 710 AQUA pails should be stored in dry and cool rooms for up to 18 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. PROTECT FROM FROST.

Safety measures

Keep away from children. Do not use empty containers for food storage. See information supplied by the manufacturer. Please study the Safety Data sheet. PROFESSIONAL USE ONLY.

* All values represent typical values and are not part of the product specification. The applied primer might yellow and/or fade upon UV exposure.