Maris Polymers®
POLYURETHANE SYSTEMS

TECHNICAL DATA SHEET
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CONSTRUCTION

MARISEAL® AQUA PRIMER

Epoxy Primer, water based

Product description

MARISEAL® AQUA PRIMER is a transparent, rigid, two component epoxy primer. Water-based.
Used as a universal primer in waterproofing, sealing and floor coating applications on absorbent and non-absorbent surfaces.

Cures by reaction (cross linking) of the two components.

Advantages

- Simple application (roller or brush).
- Excellent anchoring to absorbent and non-absorbent surfaces.
- Can be applied on moist surfaces, without loss of adhesion.
- Resistant to stagnating water.
- Can be diluted with water.
- Provides high tensile and impact strength.
- Heat and frost resistant
- Stops the creation of dust.
- Chemical resistant.

Uses

The MARISEAL® AQUA PRIMER is mainly used as a primer for polyurethane waterproofing coatings, polyurethane joint sealants and polyurethane and epoxy floor coatings on non-absorbent surfaces like:

- Power floated concrete
- Metal (various)
- Asphalt
- Bitumenfelts
- Ceramic Tiles
- Glass
- Old Acryl-based coatings, etc.

It can also be used as a primer on absorbent surfaces like concrete, mortar, plaster, etc.
It can also be used on moist concrete surfaces.
It is also used as a tack-coat between coating layers it intercoating time intervals are overstepped.

Consumption

100 - 200 gr/m^2 in one or two 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.

Colors

The MARISEAL® AQUA PRIMER is supplied transparent

Technical data*

PROPERTY	RESULTS	TEST METHOD
Composition	Epoxy resin + Hardener. Water based	
Mixing Ratio	A : B = 3 : 1	
Adhesion to aluminium	>2 N/mm^2	ASTM D 903
Adhesion to moist concrete (6%)	>1,5 N/mm^2 (concrete failure)	ASTM D 903
Hardness (SHORE A Scale)	>95	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
Application Temperature	10^{0}C to 35^{0}C	Conditions: 20°C, 50% RH
Pot Life	45-50 min	
Overcoating time	6-12 hours	
Final Curing time	7 days	

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Application

Surface Preparation

Careful surface preparation is essential for optimum finish and durability.
The surface needs to be clean and sound, free of any contamination, which may harmfully affect the adhesion of the primer. Maximum moisture content should not exceed 7%. Substrate compressive strength should be at least 25MPa, cohesive bond strength at least 1.5MPa. Old 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.

Mixing

MARISEAL® AQUA-PRIMER Component A and Component B should be mixed by low speed mechanical stirrer, according to the stipulated mixing ratio, for about 3-5 min.
ATTENTION: The mixing of the components has to be effected very thoroughly, especially on the walls and bottom of the pail until the mixture becomes fully homogeneous.

Dilute mixture with 15-25% of clean water, to regulate viscosity.

Priming

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

Apply the MARISEAL® AQUA-PRIMER (diluted with 15-25% clean water) by roller or brush, until the surface is covered.
After approx. 6-12 hours (not later than 24 hours) and while the primer is still a bit tacky, apply the polyurethane coating or the polyurethane joint-sealant.

RECOMMENDATION: If the surface is very brittle, like lightweight concrete or porous cement screed, apply two layers of the MARISEAL® AQUA PRIMER.
ATTENTION: Please ensure consumption within the Pot Life.
WARNING: Do not apply the MARISEAL® AQUA PRIMER, at ambient and ground temperatures under 10°C.

Packaging

MARISEAL® AQUA PRIMER is supplied in 15+5kg and 3+1kg pails. 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

MARISEAL® AQUA PRIMER contains amines and epoxy resins. See information supplied by the manufacturer. Please study the Safety Data sheet. PROFESSIONAL USE ONLY.