

AQUAMASTER

Ready to use liquid membrane in aqueous dispersion, elastic up to -5°C, chlorine-resistant, for waterproofing of moist environments indoors and outdoors, class DM 01P according to EN 14891. Product with very low emission of volatile organic compounds.



DESCRIPTION

Aquamaster is a ready to use liquid membrane based on synthetic resins in aqueous dispersion, without solvents, used to waterproof moist environments indoors and outdoors. It is different from other waterproofing membranes as it does not require reinforcement mesh or fabric and sealing straps to protect corners and edges.

ADVANTAGES

- Product with low volatile organic chemical emissions (VOC) conformant to class A+ (French Regulation).
- Ready-to-use product that requires no preparation.
- Unlike other waterproofing membranes it does not require reinforcement mesh or fabric and sealing straps to protect corners and edges, making it more economic and quick to install.
- Can be applied with smooth steel trowel, roller or brush.
- Reusable product. Any left-over material, if closed in the original packaging and stored at temperatures between +5°C and +35°C, can be reused even after a few months, thereby avoiding unnecessary waste.
- Thanks to its quick drying, several coats can be applied a few hours one from the other, completing waterproofing in one work day. The surface can be covered 24 hours after application of the last coat with class C2 cement adhesives or class R2 reactive adhesives according to EN 12004.

EN 14891 CLASSIFICATION

Aquamaster conforms to the DM 01P class as "a product that is waterproof to the applied liquid in dispersion with improved crack-bridging ability at low temperature (-5°C) and resistant to contact with chlorinated water" in accordance with the standard EN 14891 on waterproofing products applied in liquid form to be used under ceramic tiles glued with adhesives. The compliance of the product with the EN 14891 harmonised standard is reported in the Declaration of Performance CPR-IT608 according to the European Regulation for construction products (CPR - Construction Products Regulation No.: 305/2011/EU) and tested by a notified European body according to system 3 certification for that which concerns water impermeability.

PACKAGING

20 kg buckets - 600 kg standard pallet.
10 kg buckets - 640 kg standard pallet.



INTENDED USE

The Aquamaster membrane can be used for waterproofing of moist environments indoors and outdoors such as bathrooms in residential, public/commercial and industrial environments, shower enclosures, wellness centres and Jacuzzis, balconies, terraces, and swimming pools when ceramic tiles, mosaics or natural stones will be applied. The product can be applied on the following substrates: concrete, plaster and cement screeds, even with Litocem or Litocem Pronto base, cement levelling or Litoplan Smart base, Litoplan Rapid, cement self-levelling such as Litoliv S40 ECO, Litoliv Express, Litoliv Extra 15, gypsum panels, wooden panels, lightweight panels with cement levelling, fibre cement panels.

SWIMMING POOLS FOCUS

Aquamaster is the technical solution recommended by Litokol S.p.A. to waterproof swimming pools built in concrete before laying ceramic material or glass and ceramic mosaics. The product can be applied directly on the concrete substrate, or, in the case of uneven surfaces, on special cement levelling overlays such as Litoplan Smart (walls) and cement screeds also based on Litocem Pronto (floors). The following are some recommendations to be observed while installing the coatings.

- Respect the concrete ageing time (minimum 6 months).
- For underground tanks, take preventive measures to avoid capillary moisture ascent which could detach the waterproofing coating applied inside the tank, for example drainage along the sides of excavations or waterproofing consisting of OsmogROUT osmotic mortar.
- Once waterproofing is complete, wait at least two days before performing a waterproofing test.
- In tanks and pools that permanently hold water, three product coats are always needed (the first is diluted with 10% water).

CHECKING THE SUBSTRATES

Substrates must be absorbing, smooth, clean, dry and free from dust or loose fragments, sufficiently cured and with suitable mechanical surface resistance properties. Residue of cement, plaster or old adhesives must be mechanically removed by sanding, abrading or other suitable techniques. Any sinking or superficial imperfection can be adjusted and smoothed with suitable Litoliv Extra 15, Litoliv S40 ECO Litoliv Express, Litoplan Rapid or Litoplan Smart type of levelling or self-levelling cement. Any crack (not subject to movement) can be filled and corrected with the two-component epoxy mortar Decor Primer Fondo by covering the surface with dry sand while the product is still fresh. Consult the technical specifications for correct application. It is not allowed to apply the product on rough walls or floors that are not level or surfaces that are subject to rising damp. Pay the utmost attention when finishing corners between walls and between the floor and the walls of the environment. The table below indicates the maximum humidity values allowed and the ageing time of the main substrates.

	SUBSTRATES	AGEING TIME	MAXIMUM HUMIDITY
WALLS	Concrete walls	6 months	≤ 3% CM
	Cement plaster measured on site	1 week per cm of thickness	≤ 3% CM
	Premixed cement plaster	According to manufacturer's instructions	≤ 3% CM
	Litoplan Rapid or Litoplan Smart based levelling	24 hours	≤ 3% CM
	Gypsum panels	According to manufacturer's instructions	dry
	Wood panels	According to manufacturer's instructions	dry
	Fibre cement panels	According to manufacturer's instructions	dry
	Lightweight extruded polystyrene panels with coated surfaces	According to manufacturer's instructions	dry
FLOORS	Concrete slab	6 months	≤ 3% CM
	Cementitious screed	28 days	≤ 3% CM
	Cement screed based on LITOCER or LITOCER PRONTO	3 days	≤ 3% CM
	Levelling based on Litoliv Extra 15, Litoliv S40 ECO, Litoliv Express	24 hours	≤ 3% CM

APPLICATION

Briefly mix the product with a trowel to make the superficial emulsion even. Apply the product directly on the substrate with a smooth steel trowel, roller or brush in 2/3 subsequent coats, so that when dried it is at least 0.8-1 mm thick. For substrates which are not perfectly smooth such as cement screeds and plasters, cement levelling overlays based on Litoplan Smart or Litoplan Rapid, and lightweight panels covered with reinforced cement screeds and levelling overlays, apply the first coat of the product diluted with 10% water, so that it penetrates well into the substrate. This closes the superficial porosity of the substrate keeping bubbles from appearing in the following coats. Consumption will vary between 0.7 kg/m² for screeds and 0.35 kg/m² for cement levelling overlays. After it dries (about 30 minutes at +23°C) apply the following coats of the product not diluted. Wait about 4 hours at +23°C between the second and third coat, if needed. Each coat consumes approximately 1 kg/m². Pay the utmost attention when applying the product on edges and corners, to avoid leaving too much material which could form cracks and split when it dries. When there are passages of pipes, drains, lights, etc., position the special Lito-band SK Pipes Collar and Lito-band SK Self-Adhesive Drains Collar sealing pieces (see drawings for correct positioning). The surface can be tiled 24 hours after the last coat. For the correct choice of adhesive, see the products' technical data sheets. Generally, for applications in swimming pools or moist environments, Litoplus K55 adhesive (superwhite improved cementitious adhesive, class C2TE according to EN 12004) is suitable for laying any type of ceramic tiles (except for thin slabs with reinforcement matt on back) and glass or ceramic mosaics. Another solution, especially for glass mosaics, is Starlike® epoxy mortar, which can be used both as adhesive and grout for joints. For different material, consult Litokol S.p.A.'s technical assistance centre to correctly choose the product.

WARNINGS

- Do not add lime, cement or other foreign materials to the product.
- Apply the product at a temperature between +5°C and +35°C.
- Do not apply the product on plastic or metal materials.
- Do not apply the product on non-absorbent substrates such old ceramic tiles, marble tiles or natural stones.
- Do not apply the product on surfaces subject to rising humidity.
- Do not apply the product if condensation forms on the substrates.
- For substrates which are not perfectly smooth such as cement screeds and plasters, or levelling based on Litoplan Smart or Litoplan Rapid, apply the first coat of the product diluted with 10% water, so that it penetrates well into the substrate.
- The product should not be left exposed. Always provide a ceramic, mosaic or natural stone tiling.
- Do not use the product for applications not stated in this technical data sheet.
- In case of doubt, contact the LITOKOL S.p.A. Technical Assistance

INFORMATION ON SAFETY

Refer to the product's safety sheets available upon request.

PRODUCT FOR PROFESSIONAL USE

SPECIFICATIONS

Moist areas indoors and outdoors such as bathrooms, shower enclosures, balconies, terraces and swimming pools which will be tiled with ceramic materials, natural stones and mosaics, must be waterproofed with a ready to use liquid membrane in an aqueous dispersion, elastic, class DMO1P according to EN 14891 such as AQUAMASTER manufactured by Litokol S.p.A.



IDENTIFICATION DATA	
Appearance	Thixotropic paste
Colour	Grey
Solid content	73-76%
Density	1,6 ± 0,1
Brookfield viscosity (th 6 – 20 rpm)	20.000-35.000 mPas
pH	8-9
Classification according to EN 14891	DMO1P - product that is waterproof to the applied liquid in dispersion with improved crack-bridging ability at low temperature (-5°C) and resistant to contact with chlorinated water
Custom tariff	40021100
Storage time	24 months inside the original packaging in a cool dry place. Protect from frost.

APPLICATION DATA	
Application	Roller, brush or smooth steel trowel
Application temperatures allowed	From +5°C to +35°C
Total thickness to be applied in two/three subsequent coats	0.8-1 mm
Drying time at t=+23°C	1st coat (diluted with 10% water): 30 minutes – 2nd coat: 4 hours
Cleaning	The equipment must be cleaned from product residue with water before the product hardens. Once it is dry, only mechanically.
Waiting time before laying ceramics	At least 24 hours after application of last coat.

CONSUMPTION (kg/m ²)				
Substrates	1st coat (dil.10%)	2nd coat	3rd coat	Total consumption
Cementitious screeds, Litocem/Litocem Pronto-based screeds	0,7	0,8	0,8	2,3
Cement levelling overlays, Litoplan Smart, Litoplan Rapid, lightweight panels with cement	0,35	0,8	0,8	1,95
Gypsum board, wooden panels, concrete, fibrocement panels, cement self-levelling overlays	-	0,8	0,8	1,6

PERFORMANCE	
Water impermeability in positive pressure according to EN 14891-A7 (150 kPa for 7 days)	No weight increase penetration < 20 grams
Initial tensile strength adhesion in accordance with EN 14891-A.6.5	≥ 0,5 N/mm ²
Tensile strength adhesion after immersion in water in accordance with EN 14891-A.6.3	≥ 0,5 N/mm ²
Tensile strength adhesion after thermal ageing in accordance with EN 14891-A.6.5	≥ 0,5 N/mm ²
Tensile strength adhesion after frost-melting cycles in accordance with EN 14891-A.6.6	≥ 0,5 N/mm ²
Tensile strength adhesion after contact with chlorinated water in accordance with EN 14891-A.6.7	≥ 0,5 N/mm ²
Tensile strength adhesion after contact with lime water in accordance with EN 14891-A.6.9	≥ 0,5 N/mm ²
Crack-bridging capacity under normal conditions in accordance with EN 14891-A8.2	≥ 0,75 mm
Crack-bridging capacity at low temperature (-5°C) in accordance with EN 14891-A.8.3	≥ 0,75 mm

The adhesion values were determined with class C2 Elastocem and cementitious adhesive in accordance with EN 12004.

Although the information in this technical data sheet is the result of our best experience, it is merely indicative.

Each specific case must be subjected to practical preliminary tests by the user who undertakes the responsibility for the final work result.

Sheet no. 608

Revision no. 2

Date: June 2019

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HI-PERFORMANCE BUILDING PRODUCTS

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