

**Elastocolor®
Waterproof**



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**Elastocolor®
Waterproof**

Flexible, acrylic resin-based paint
in water dispersion, for protecting structures
waterproofed with MAPELASTIC or MAPELASTIC SMART
in direct, permanent contact with water

Distributor



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Elastocolor® Waterproof

**ACRYLIC FINISHING SYSTEM IN WATER
DISPERSION FOR PROTECTING AND DECORATING
INTERNAL SURFACES SUCH AS SWIMMING POOLS,
BASINS FOR CONTAINING NON-DRINKABLE WATER
AND FOUNTAINS, OR EXTERNAL SURFACES SUCH
AS FLAT ROOFS OR GUTTERING IN BRICKWORK**

**MAPEI TECHNOLOGY FOR PROTECTING
STRUCTURES WATERPROOFED WITH MAPELASTIC
OR MAPELASTIC SMART IN DIRECT, PERMANENT
CONTACT WITH WATER, GUARANTEES:**

- Perfect compatibility with MAPELASTIC or MAPELASTIC SMART
- High resistance to water
- High flexibility
- Protection against water, aggressive environmental agents in general and sunlight; durable over a long period of time
- High resistance to all climatic conditions and freeze-thaw cycles
- If it is of a suitable colour, reduction in the absorption of solar radiation and overheating of the surface



PROBLEM

LONG-TERM IMMERSION TEST OF A COAT OF PAINT IN WATER **1**



1. Blistered non-im-permeable paint 1. Elastocolor Waterproof

FLEXIBILITY TEST OF A LAYER OF PAINT APPLIED ON MAPELASTIC **2**



2. Detailed view of cracking of non-flexible paint 2. Elastocolor Waterproof

MAPEI's vast experience in the construction of basins for holding water (swimming pools, drinking water, etc.) suggests that it is indispensable to use suitable products which guarantee durability over a long period of time. From the base materials (concrete for the structure) up to the final base and finishing layers, it is obviously necessary that they are waterproof, in order to avoid them detaching or blistering (photo 1). They must also be flexible, to allow for thermal expansion (due to the seasons) without cracking or micro-cracking (photo 2), which are the starting point for deterioration of the structure. If these few, simple rules are not followed, deterioration is inevitable and will provoke clear damage, for which repair becomes difficult, time-consuming and expensive. The same may be said for horizontal surfaces where water collects and stagnates (flat roofs, cement guttering, etc.). In this case, waterproofing (using **MAPELASTIC** or **MAPELASTIC SMART**) is just as important, and must also be painted over with a compatible, flexible product with the same waterproofing characteristics, apart from being extremely resistant to deterioration provoked by acid rain and exposure to solar radiation. Also, if it is a suitable colour, the finishing layer reduces the absorption of solar radiation and overheating of the surface. The only product which guarantees all these characteristics, which are very difficult to combine in a single paint-on product, is **ELASTOCOLOR WATERPROOF**.



3. Deteriorated swimming pool

The problems mentioned previously may be solved by using the wide experience of MAPEI in the field of preparation and finishing systems for the building industry. If these systems are used together correctly, they guarantee protection, decoration and durability.

Phase 1 "WATERPROOFING" Mapelastic or Mapelastic Smart

Two-component, flexible cementitious mortar which guarantees:

- **Waterproofing**, with its special composition which contains a high percentage of synthetic resins.
- **Permanent flexibility**, with its high rate of elongation before fracture.
- **Durability over a long period of time**, with its excellent bond strength to substrates.
- **Ease of use**, with its rheologic properties. May be applied by trowel, roller or brush (**MAPELASTIC SMART** version).
- **Versatility**, wide variety of uses with its special formulation. A single product to solve a vast array of problems commonly found in the building industry, which generally require the use of several products.

SOLUTION

Mapelastic



Mapelastic Smart



Phase 2 "PROTECTION AND DECORATION" Elastocolor Waterproof

Flexible, acrylic resin-base paint in water dispersion which guarantees:

- **Waterproofing**, when in direct constant contact with water.
- **Permanent flexibility**, to accommodate the movement of the substrate within defined limits without causing any damage to the finish.
- **Resistance** to treatment products normally used for water in swimming pools.
- **High bond strength**, perfectly compatible with the base products.
- **Resistance** to sunlight and all climatic conditions.

ELASTOCOLOR WATERPROOF may also be used for decorating. It is available in 6 standard colours. Further colours may also be created according to individual samples by using the **ColorMap**® automatic colouring system.

Elastocolor® Waterproof



Preparation of the substrate

It is important that the substrate is prepared correctly to get good results and to guarantee that the application is durable.

New surfaces or surfaces which have been patched-up with repair mortar must be well cured, perfectly clean, sound and dry.

Remove all traces of oil and grease and parts which are not well-attached, from the surface.

Seal any cracks which are present and repair any deteriorated areas.

Seal off the porosity and smooth off any uneven parts in the substrate.

When being applied in swimming pools, the bottom and perimeter walls must be prepared as described in the Mapei technical notebook "POOL CONSTRUCTION"

up to the waterproofing phase carried out using **MAPELASTIC**

or **MAPELASTIC SMART** (photos 4 and 5).

In other cases, apply a suitable waterproofing layer with **MAPELASTIC** or **MAPELASTIC SMART**, following the instructions on the specific technical data sheet.

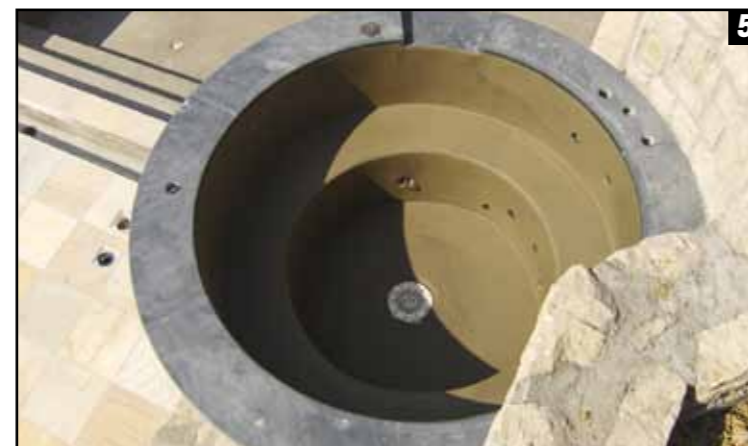
(photo 6). After at least 20 days after applying **MAPELASTIC** or **MAPELASTIC SMART**

apply **ELASTOCOLOR WATERPROOF**, which does not require the use of any primer.

However, preparation of the substrate must be completed by applying a base layer of **ELASTOCOLOR WATERPROOF** diluted with 5-10% of water.



4. Waterproofing of a swimming pool with Mapelastic



5. Waterproofing of a Jacuzzi with Mapelastic



6. Waterproofing of a cement gutter with Mapelastic Smart

Application procedure

Elastocolor Waterproof is ready to use.

Apply a base coat of **ELASTOCOLOR WATERPROOF** containing approximately 5-10% of water. For the successive coats, use the product undiluted.

Carefully blend the product before use, using a low-speed drill if required, avoiding the entrapment of air. Apply **ELASTOCOLOR WATERPROOF** using traditional techniques, such as a brush or a roller.

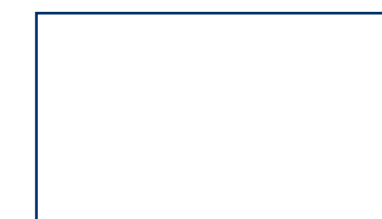
In the case of protection cycles, apply at least three coats of **ELASTOCOLOR WATERPROOF** (one base coat and two finishing coats). Under normal humidity and temperature conditions, wait 24 hours between each coat. Protect the surface from rain after painting, to avoid water coming into contact after the first application of **ELASTOCOLOR WATERPROOF** and compromising the bond when it is not completely dry.



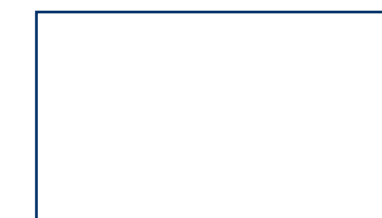
Technical characteristics

TECHNICAL DATA	
Appearance	thick liquid
Dry solids content (%)	63
Density (g/cm ³)	approx. 1.30
Theoretical yield (m ² /kg)	1-2
Moisture abrasion DIN 53778 (cycles)	> 10,000
Elongation at break after 15 days at +23°C (%)	ca. 220
Elongation at break after 60 days at +23°C (%)	ca. 200
Elongation at break on a MAPELASTIC cycle after 1,000 hours of accelerated aging with a Weather-Ometer according to ASTM G155 cycle 1 [%]	approx. 21
Colour variation after 1,000 hours exposure to a Weather-Ometer (according to ASTM G 6155 cycle 1), standards (white)	ΔE <1
Vapour diffusion resistance coefficient (DIN 52615) [μ]	4.500
Resistance to the passage of vapour relative to a 0.10 mm-thick dry coat Sd (m) (DIN 52615)	0.45
Capillary action water absorption coefficient W ₂₄ (kg/(m ² h ^{0.5})) (DIN 52617)	0.03
Sd·W = The value of Sd·W is less than 0.1, therefore ELASTOCOLOR WATERPROOF respects Kuenzle's Theory (DIN 18550)	0.013 kg/(m·h ^{0.5})
HOW TO USE	
Application system	brush, roller, mixed air spray
Application procedure	at least 3 coats first coat only: dilute with 5-10% of water, successive coats as is
Waiting time before filling basins	20 days under normal temperature and humidity conditions

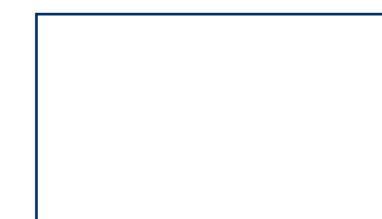
Colour chart



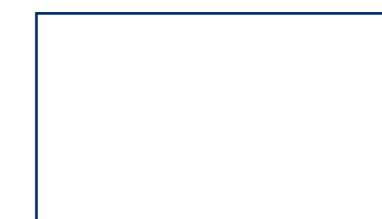
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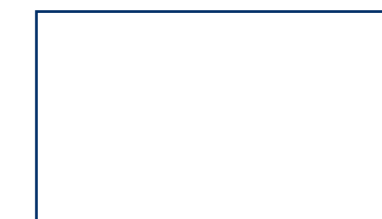
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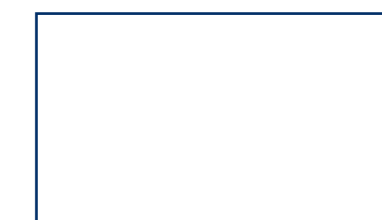
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