

# WAXED CONCRETE

TECHNICAL SHEET  
Updated 13/07/2022



MARIUS AURENTI

## Classic Waxed concrete Local-Mix + Blush Mineral color concentrate Local-Mix

Kit with 3 components for floors , walls, bathrooms and furnitures.  
It represents 6,5 m<sup>2</sup> of floors (4 kg / m<sup>2</sup>) and up to 12 m<sup>2</sup> of dry walls (2,5 kg / m<sup>2</sup>).

High performance millimetric hydraulic mortar to be used such as "Waxed concrete" for interior and exterior decorative coating use (floors, walls, bathrooms, work surfaces, objects, etc).

This product created for more than 25 years ago was the first micro waxed concrete in the world, a Made in France invention that has already enable the implementation of thousands of square meters.

It has excellent chemical, mechanical, adhesion and waterproof resistance .

It is available in 71 colors (Blush Mineral color concentrate Local-Mix).

It constitutes the mass coating of the Waxed concrete system of Marius Aurenti (refer to the following System sheet). The selection of the coating for the preparation (primer) and the coating for the finishing (varnish , impregnator or wax) has to be in adequation to the use and the premises .

A maintenance guide provides all requirements according to the finishings and uses.

## PACKAGING

Kit of 3 components

- Classic waxed concrete white base component A / 18,8 kg
- Classic Waxed Concrete liquid component B / 5,32 kg
- Blush Concentrate Mineral Color Local Mix / 1,2 kg

## 7 MAIN ADVANTAGES OF THE MA'S WAXED CONCRETE :

- *Without specific seams*
- *15 years warranty of not any cracking*
- *A high resistance varnish range from matte to glossy*
- *Smooth nonslip textures*
- *71 mineral colors*
- *2 mm thickness*
- *44MPa*



**FEATURES**

The Classic waxed concrete system + Blush Mineral color concentrate Local-Mix Marius Aurenti combines :

- One coat for the preparation of the substrates
- One mass coat
- One coat for the finishing

Please refer for each subject to the corresponding Technical Sheets and Safety data sheets

	SUBSTRATE	PRODUCT NAME	NUMBER OF COAT	WHOLE CONSUMPTION
COAT FOR THE PREPARATION OF THE SUBSTRATE	Former or new hydraulic substrates	Porous substrates primer	1 to 2 coats depending on the substrate porosity	100 to 200g/m <sup>2</sup> depending on the porosity of the substrate
	Tiles	EPX2 Superior primer + SQ10 sand	1 to 2 coats depending on the substrate	1 to 1.5 kg/m <sup>2</sup>
	Wood derivative (chipboard, medium, plywood, etc)	Wall primer	1 coat	100 to 120 ml/m <sup>2</sup>
MASS COAT	/	Millimetric Decorative Mortar Marius Aurenti	2 coats	4 kg/m <sup>2</sup>
COAT FOR THE FINISHING		Impregnator n°5 + n°7 Visco varnish  or  IF3 Fixative	2 coats  2 coats  or  ≥ to 3 coats	100 to 250 g/m <sup>2</sup>  250 to 300 g/m <sup>2</sup>  or  300 to 430 g/m <sup>2</sup> minimum

The Classic Waxed Concrete System + Blush Mineral Color Concentrate Local-Mix is available in 71 colors of the IRIS color chart of Marius Aurenti.

The type of substrate needs to be prepared with specific primers. Refer to our Data Sheets . Substrates must be sound, clean, dry, stable and rigid , with good cohesion and without cracks (free from grease , oil or stain, milky finish). Substrates should conform to current building regulations (DTU in force). Active cracks and expansion seam will be left open and will not be recovered. They will be covered by the MS Polymer Color Marius Aurenti once the Classic waxed concrete is applied. Concrete substrates and concrete screeds must have made 28 days at least. They must be flat , cohesive, clean and have a humidity rate <4% or 0.5% for the fluid concrete screed based with calcium sulphate.

## A) NEW SUBSTRATES MADE FROM HYDRAULIC BINDER

- Concrete slabs or adhesive screeds in compliance with the French standards NF DTU 26.2.
  - concrete and non unified floating screeds made with cement mortar in compliance with the French standards NF DTU 26.2.
  - Fluid screeds made from cement needing technical advice / DTA in favour and in force for the use required .
  - Floor slabs in compliance with the requirements of the French standards DTU 21 (norme P18-201) continuity on rest.
    - Full slabs of reinforced concrete poured on site
    - Full slabs poured on pre slabs in reinforced concrete
    - Full slabs poured on pre slabs of prestressed concrete
  - Ribbed floors with prestressed concrete beams (BP) or reinforced concrete (BA) and slabs displayed fully poured with continuity on rest.
  - Floors made of alveolus slabs in BP or BA with other slabs in reinforced concrete with continuity on rest and control of the cracks as considered by the French standards NF DTU 23.2.
- Fibred or non fibred hydraulic screeds are not allowed.
- The substrate must be insulated from earth platforms and capillary rise from beneath such as from edges

## B) PAVINGS, FLOORS IN CONCRETE ON CRAWL SPACES AND FLOORS IN POURED CONCRETE IN NEW STEEL TRAY

- Pavings in concrete and floors in concrete on crawl spaces must be built in compliance with the French standards NF P 11-213 (DTU 13.3) ; They must be reinforced as mentioned on the French standards DTU.
- Floors in poured concrete in steel tray with continuity should be built in compliance with the French standards NF P 18-201 (DTU 21).

If the implementation is based on a substrate ( concrete slab) smoothed with a concrete smoothing , a mechanical surfacing must be done before to ensure an optimum adhesion of the primer then of the waxed concrete of Marius Aurenti.

## C) FLUID SCREEDS MADE FROM CALCIUM SULPHATE

- Fluid screeds made from calcium sulphate should be made and accepted according to the Technical Advice valid and to the French regulations and advice « Cahier des Prescriptions Techniques d'exécution des chapes fluides à base de sulfate de calcium » (e-cahier du CSTB 3578\_V2).

## D) FORMER FLOOR POURED COATINGS MADE FROM SYNTHETIC RESIN

- Former floorpoured coatings made from synthetic resin in compliance with CPT 3716 – requirements « Exécution des revêtements de sol coulés à base de résine de synthèse – rénovation ».

## E) FORMER TILES AND MARBLES

- Existing tiles , in good condition, showing a good adhesion to the substrate (glued tile). Implementations on exterior tiles and pavings and not allowed .

For tiled substrates and marble , once a surfacing made before with the diamond grinder , the EPX2 Multi PRIMER must be used , applied as mortar then sanded until absorption ( DO Refer to the Technical Sheet).

## F) SUBSTRATES IN HUMID ROOMS

For implementations in humid rooms ( such as a bathroom), waterproofing like S.E.L (Système d'Etanchéité Liquide/ Liquid waterproofing system) must be done before. All junctions between the materials of different types must be treated with flexible and waterproof seals.

For all implementations such as in showers, the substrate must show a slop >2%.

For implementation on WEDI shower tray , already waterprooved with the WEDI waterproofing system, a primer MUST be applied :

- either the EPX2 Superior primer to apply as mortar then sanded until acceptance . The EPX2 Superior primer Gelling agent can be used if required . (Do refer to the Technical sheets).
- or the TOP WEDI system (Do refer to the Technical sheet). A preparation of the TOP WEDI before applying the MA's Waxed concrete is required so as to allow the good adhesion of the Waxed Concrete. Refer to our teams.

## G) SUBSTRATES IN SWIMMING POOLS AND POOLS

In swimming pools and pools , as the preparations of the substrates are very specific and so for the methods of implementation, please refer to the Marius Aurenti swimming pool guide.

## H) OTHER SUBSTRATES

- Aerated concrete
- Wall plaster boards (excluding floors)
- Concrete slabs
- Bricks
- Concrete blocks
- Wood derivatives (chipboard, medium, plywood, etc)



## **COLORS AND MIXINGS**

To ensure the uniformity of the tint , for the same work , use the same batch number for component A and the same batch number for Blush Mineral colour concentrate Local Mix.

The Blush Mineral colour concentrate Local Mix contain pigments, chemical stresses and adjuvants in different proportions so as to obtain a rheology (fluidity and texture) constant of the final product. It is strictly forbidden to mix concentrates between them.

Classic Waxed Concrete bases (Local Mix) are semi finished materials . A concentrate must ne added so that the properties of the Classic Waxed Concrete are complete and the formula stable. Even in for a white colour, a Blush Mineral colour concentrate Local Mix White must be added . Using a base only without addition of Concentrate (Local Mix) modify the nature of the product and reduce the chemical and mechanical performance of the system .

The product **MUST** be used with mixing 3 components.

Nether add water.

## **PURPOSES**

Not to be used in sauna and hammam.

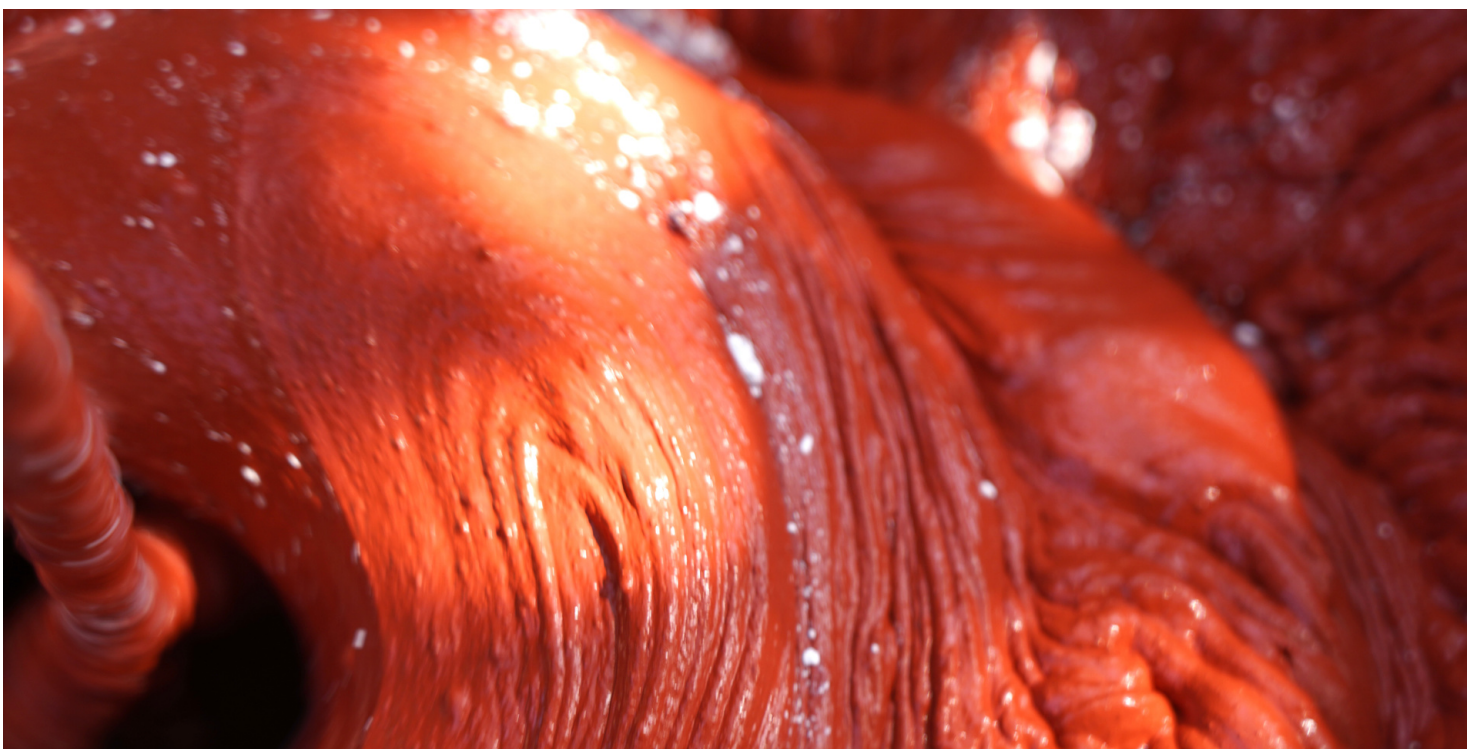
Do not apply on solid wood , flexible wood floorings, plastics and textiles, terracotta and tomette.

## **STORAGE AND SAFETY**

1 year in its original packaging not open, out of sun , freeze, under temperature from +5° and 25°C, ideally from 15 and 20°C. Check the “Use by” date on the packing before any use. Once open, the product must be used within 7 days.

Use the individual safety equipment required according to the Safety Data sheets.

For further information about the safety, refer to the Safety Data sheets.



The preparation consists in a dry mix ( it allows partial use in 1 kit ) or in a humid mix (whole use of the kit).

## DRY MIX

For a dry mix, always mix the whole base and concentrate before proceeding to an eventual division.

- Roll the bucket of the base to aerate and make the material souple
- Open the bucket of the base and make a little hole in the center of the base
- Shake the pot of concentrate and open it
- Poor the concentrate in the center of the bucket of the base
- Block the bucket with feet and mix the base and the concentrate (ideally with a mixer dedicated for pasty products , contact us for tariffs)
- Dive the mixer and increase the speed step by step
- Continue mixing with vertical and lateral movements straight and inclined so as to mix perfectly the both products. Insist on edges at the bottom of the pot in order not to forget corners that are difficult to mix . For first mixes , we recommend you to poor the mixed content in a same size bucket so as to check visually the quantity of the mix and if required being able to make more. The mix must last at least 1 minute and must not be inferior.
- Add the component B (liquid) to the quantity of powder prepared : base (component A) + Blush Mineral colour concentrate Local-Mix perfectly mixed according the following requirements below :

COMPONENT B (LIQUID) IN KG	COMPONENT A + BLUSH MINERAL COLOR CONCENTRATE LOCAL-MIX (COLORED POWDER) IN KG	READY MADE PRODUCT IN KG
0,21	0,79	1,00
0,42	1,58	2,00
0,63	2,37	3,00
1,26	4,74	6,00
2,66	10,00	12,66
5,32	20,00	25,32

NB : The conservation of the materials once dry mixed is not altered by the mixing if the buckets (base + concentrate) are closed and stored according to the requirements .

## HUMID MIXING

- Poor the liquid part (component B, 5.32kg) in a clean and empty bucket
- Shake the pot of Blush Mineral Color Concentrate Local-Mix and open it
- Poor the Blush Mineral Color Concentrate Local-Mix in the liquid
- Block the bucket and mix at a gradual speed until getting a uniform the liquid and the concentrate
- Add the powder (Component A) in the liquid .
- Mix mechanically for 2 to 3 minutes until obtaining a homogeneous mixing.

Never add water





## HYGROMETRY

Applying the Waxed Concrete system Marius Aurenti must be done within a period with an ambient relative humidity from 30% to 80% except for varnishes that require a humidity time slot superior to 40% and lower than 80%, ideally between 50% and 65%.

Humidity conditions should be maintained for at least 48 hours after application of the last coat.

Protect from wind, direct sun, rain, and freeze and against the fauna and flora environment during the application and the solidification of the components.

Before any application, control the humidity of the substrate, (4% maximum and  $\leq 0,5\%$  for the fluid screeds base from calcium sulphate).

## TEMPERATURE

Before beginning any application, it is imperative to check the temperature of the substrate and the ambient temperature. The temperature of the substrate must be between  $+5^{\circ}\text{C}$  and  $+25^{\circ}\text{C}$  (ideal temperature  $> 15^{\circ}\text{C}$  and  $20^{\circ}\text{C}$ ). It must be superior to  $3^{\circ}\text{C}$  at least of the temperature corresponding to the dew point.

The Waxed Concrete System Marius Aurenti can be applied under ambient temperatures between  $5^{\circ}\text{C}$  and  $25^{\circ}\text{C}$  for the Waxed Concrete and between  $15^{\circ}\text{C}$  and  $25^{\circ}\text{C}$  for the varnishes and at least 24 hours before the first application and at least 24 hours after application of the last coat.

The temperatures low and high will respectively slow down and accelerate the solidification. The application must not be done during freezing period or high heat. Plan heating or cooling systems if the works require them.

## MATERIAL REQUIRED FOR APPLICATION

Notched trowel 6 mm with triangular notches, (for the first coat only).

Smoothing trowel as Parfait'Liss 35 cm, a stainless steel smoothing trowel or plastic one 200 mm.

Sponge trowel or mason's sponge (dry) for a non slip finishing.

Clean the tools with water.



The Waxed Concrete Marius Aurenti consists of a bi-component mortar applied in 2 mm thickness.

Apply a first coat of Waxed Concrete with a consumption of around 3 kg/m<sup>2</sup> (around 1,5 mm thickness) with the trowel or the smoothing trowel .

In order to make a regular thickness, it is possible to apply the first coat with a notched trowel of 6 mm then smooth until the ridges made by the notches disappear completely.

In that case, the smoothing must be made immediately in the fresh Waxed Concrete . This first coat determines the thickness and the final aesthetic effects.

Before applying the second coat and 24h after the application of the first coat (at 20°C, 60% relative humidity), it is possible to sand the surface to get decorative effects or too important irregularities (grain 40) with a single bush (or an orbital grinder), then perfectly dust mechanically.

Apply the second coat with an average consumption of 1 kg/m<sup>2</sup> , with the stainless steel trowel or with the smoothing one. This second coat determines the final grain of the coating and its aesthetic aspect.

It can be noticed that an application tool in stainless steel may leave some dark marks ( and most of all on clear colours). A plastic tool may be more adequate.

After 24 heures dry (at 20°C, 60% of relative humidity), sand the surface (grain 60 then grain 80) with the single brush (or an orbital grinder) then perfectly dust mechanically

The intensity of the sanding will provide the final aspect of the surface (rough or smooth) and will underline the effects of the materials.

If the surface is considered as compliant, proceed to the application of the finishing.

4 finishings are possible (refer to the Technical sheets of the following products ) :

Interior finishings :

- IF3 Fixative
- Impregnator n°5 + varnish N°7 (They MUST be used together to avoid any whitening)

Exterior finishings :

- Terrace impregnator n°2

## CONSUMPTION

<b>FLOORS, SHOWER WALLS, WORK SURFACES, FURNITURES</b>	4 kg/m <sup>2</sup> for 2 coats	From 0,7 mm to 2 mm per coat
<b>WALLS (NO HIGH USE CONSTRIANTS)</b>	2,5 kg/m <sup>2</sup> for 2 coats	
<b>POOLS AND SWIMMING POOLS</b>	8 kg/m <sup>2</sup> for 3 coats	

## DRYING TIME AT 20°C AND 60% RELATIVE HUMIDITY

<b>OPEN TIME</b>	25 to 30 minutes
<b>DRY TO THE TOUCH</b>	4 hours
<b>BETWEEN THE LAYERS</b>	24 hours minimum
<b>FULL DRYING</b>	2 days but mechanical resistance reached after 28 days

The surface should not be exposed to use constraints before the complete drying of the treatment system, that is to say 7 days at 20°C and 60% of relative humidity.

Between 2 days and 7 days, a light traffic can be possible on the following conditions : micro breathable tarps such as Floorliner Vapor of Landolt, walking with socks overshoes. Not any exposure to water or chemical agents is tolerated, avoid frictions and furniture scratches . It is forbidden to place adhesives on coatings.

Do not place the carpets before 7 days.

## **VERY IMPORTANT :**

The maximum hardness of the Waxed Concrete System Marius Aurenti is obtained after 28 days of drying.

The acceptance of the work must be proceeded immediately after the end of the work . The System of Marius Aurenti newly made will be protected from other workers that may operate for other work thanks to materials of protection and allowing the ventilation (cf. Data Sheet of Varnish n°7 Visco and Fixative IF3).

Lead time for the first cleaning with water : 3 days minimum after the varnish n°7 or the Fixative IF3 application.



Based on the Test Reports of the CSTB (Centre Scientifique Technique du Bâtiment), the Test Reports of the LNE (Laboratoire National de Métrologie et d'essais) and the Test Reports of the Laboratory of Marius Aurenti.

CSTB n° RA12-0208

CSTB n° RA20-0353

CSTB n° R2EM-11-26022578

CSTB n° R2EM-SIST-14-26047471

CSTB n° ES541200113

CSTB n° DSR-SIST-22-26085256

LNE n° CX 1600936

Matières Marius Aurenti company declares that the Systems of Marius Aurenti : the Classic Waxed Concrete and the Fluid Waxed Concrete with the varnish finishings of Marius Aurenti are in compliance with the following performance (pages 13-14-15), according to the requirements of implementation.





<b>Bending resistance (NF EN 13892-2)</b>	16,8 N/mm <sup>2</sup>
<b>Compressive strength (NF EN 13892-2)</b>	44,1 N/mm <sup>2</sup>
<b>Punching resistance (NF EN 13892-6)</b>	293,5 N/mm <sup>2</sup>
<b>Surface hardness (NF EN 13892-6 :2003)</b>	119,1 N/mm <sup>2</sup>
<b>BCA wear resistance (NF 13892-8 :2003)</b>	0,08 mm
<b>Impact resistance 1kg-200 cm (NF EN ISO 6272)</b>	Not any cracking
<b>Adhesion force (NF EN 13892-8 :2003)</b>	2,5 N/mm <sup>2</sup> Cohesive break
<b>Reaction to fire (NF EN ISO 9239-1, NF EN ISO 13501-1 et NF EN ISO 11925-2)</b>	Bf1-S1 (IF3, Visco n°7 et HR1)
<b>Slippery resistance (maximum figures reached linked to the application methods) (XP P05-010 et XP P05-011)</b>	PN 24 PC 20
<b>Water permeability (NF EN 1062-3 :2003)</b>	0,08 kg/m <sup>2</sup> .h0,5
<b>Reaction to a wheelchair rolling (NF EN 425 : 2012) 25 000 cycles, 21°C, 55% HR, Fixatif IF3</b>	Residual traces in the wheel area circulation

## STAIN RESISTANCE (NF EN 423 :2002)

<b>Indice selon NF EN 423</b>	<b>Test result after cleaning</b>
0	Insensitive
1	Relatively insensitive
2	Sensitive
3	Very sensitive

## WAXED CONCRETE + VARNISH HR1

	Exposure time to reagents			
Reagents	5 minutes	2 hours	6 hours	24 hours
Coffee	0	0	0	0
Tea	0	0	0	0
Oil (peanuts)	0	0	0	0
Vinegar	0	0	0	0
Lemon juice	0	0	0	0
Red wine	0	0	0	0
Demineralised water	0	0	0	0
Sparkling water	0	0	0	0
Polish (black) *	0	0	0	0
Crushing of a cigarette*	0	0	0	0
Ammoniac 15%	0	0	0	0
Acetone*	0	0	0	0
Bleach- Sodium hydrochlorite (solution 12%)	0	0	0	0
Hydro alcoholic gel (Ethylic alcohol 70%)	1	2	3 (white spot)	3 (white spot)
Hydrochloric acid (solution 20%)	0	0	0	0
Potassium hydroxide (solution 30g/L)	0	0	0	0
Ammonium chloride (solution 100g/L)	0	0	0	0
Sodium hydroxide (solution 10%)	0	0	0	0
Acetic acid (solution 5%)	0	0	0	0
Acetic acid (solution 10%)	0	0	0	0
Ball point pen ink *	3	3	3	3

## WAXED CONCRETE + FIXATIVE IF3

	Exposure time to reagents			
Reagents	5 minutes	2 hours	6 hours	24 hours
Coffee	0	0	0	0
Tea	0	0	0	0
Oil (peanuts)	0	0	0	0
Vinegar	0	0	0	0
Lemon juice	0	0	0	0
Red wine	0	0	0	0
Demineralised water	0	0	0	0
Sparkling water	0	0	0	0
Polish (black)*	0	0	1 (darken the pores)	1 (darken the pores)
Crushing of a cigarette*	1 (yellow spot)	1 (yellow spot)	1 (yellow spot)	1 (yellow spot)
Ammoniac 15%	0	0	0	0
Acetone*	3 (white spot)	3 (white spot)	3 (white spot)	3 (white spot)
Bleach- Sodium hydrochlorite (solution 12%)	0	0	0	0
Hydro alcoholic gel (Ethylic alcohol 70%)	1	2	3 (white spot)	3 (white spot)
Hydrochloric acid (solution 20%)	0	0	0	0
Potassium hydroxide (solution 30g/L)	0	0	0	0
Ammonium chloride (solution 100g/L)	0	0	0	0
Sodium hydroxide (solution 10%)	0	0	0	0
Acetic acid (solution 5%)	0	0	0	0
Acetic acid (solution 10%)	0	0	0	0
Ball point pen ink*	3	3	3	3

## WAXED CONCRETE + VARNISH N°7

	Exposure time to reagents			
Reagents	5 minutes	2 hours	6 hours	24 hours
Coffee	0	0	0	0
Tea	0	0	0	0
Oil (peanuts)	0	0	0	0
Vinegar	0	2 (darker the tint)	2 (darker the tint)	2 (darker the tint)
Lemon juice	0	0	0	0
Red wine	0	0	0	0
Demineralised water	0	0	0	0
Sparkling water	0	0	0	0
Polish (black)*	0	0	0	0
Crushing of a cigarette*	1 (yellow spot)	1 (yellow spot)	1 (yellow spot)	1 (yellow spot)
Ammoniac 15%	0	0	0	0
Acetone*	1 (white spot)	1 (white spot)	1 (white spot)	1 (white spot)
Bleach- Sodium hydrochlorite (solution 12%)	0	0	0	0
Hydro alcoholic gel (Ethylic alcohol 70%)	3 (white spot)	3 (white spot)	2	2
Hydrochloric acid (solution 20%)	0	1 (darker the tint)	2 (darker the tint)	2 (darker the tint)
Potassium hydroxide (solution 30g/L)	0	0	0	0
Ammonium chloride (solution 100g/L)	0	0	0	0
Sodium hydroxide (solution 10%)	0	0	0	0
Acetic acid (solution 5%)	0	0	0	0
Acetic acid (solution 10%)	0	2 (darker the tint)	2 (darker the tint)	2 (darker the tint)
Ball point pen ink*	3	3	3	3



**(\*) : Tests based on a panel of 12 varnishes known on the market of the waxed concrete.**

**After 2 hours of exposure :**

From 85% to 95% of the varnishes on the market show spots to vinegar or acetic acid (solution 10%).

**After 5 minutes of exposure :**

More than 65% of the varnishes on the market show spots to acetone.

More than 75% of the varnishes on the market show spots when crushing a cigarette.

100% of the varnishes are sensitive to ball point pen ink.

**CE conformity marking , according to the Directive 93/68/EEC :**



OCEAN Marius Aurenti  
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Rovaltain TGV Nord  
BP 21034  
26958 Valence cedex 9  
FRANCE  
17

EN 13813

Waxed concrete MA's

Reaction to fire : Bf1S1

Compressive strength : C40

Bending resistance : F15

Wear resistance : AR1

Adhesion force : B2,0

# MARIUS AURENTI

For 40 years, we continue innovating to improve the purity of our materials and the feeling that they provide.

A mineral and plant aesthetic , close to Nature for which our works pay tribute to and our environmental commitment is fully engaged.

MA's, with its trainings and support, is at skilled French crafts sides that every day in our workshops as well as on sites strive to make each place unique, nice and timeless.



[www.mariusaurenti.com](http://www.mariusaurenti.com)

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