MARIUS AURENTI

MORPHEO M700 CLASSIC + MORPHEO BLUSH CONCENTRATE

3-component kit for floors, walls, bathrooms and furniture.

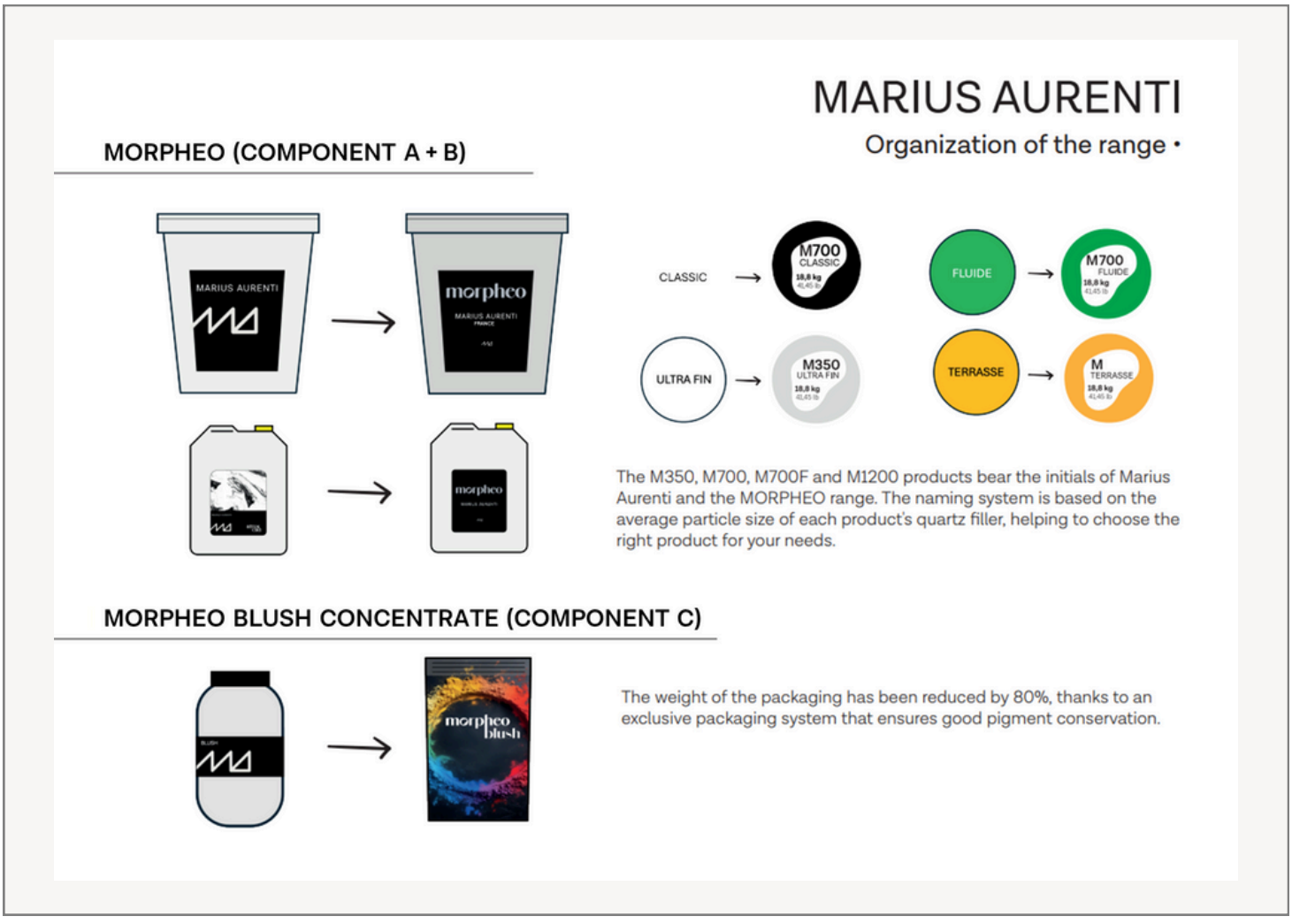
TECHNICAL SHEET
Edition of 02/17/2025

Marius Aurenti has decided to unify the brand's messaging and create a distinctive name for his decorative mortars range.

This name evokes the products' ability to transform a space, give shape to materials, and alter environments.

The new range name is MORPHEO by Marius Aurenti.
This timeless, almost ancient sound carries the notion of metamorphosis. Etymologically, "morphe" means form, and Morphéo is 'the one who gives birth to form.'

Morphéo represents the ability to transform, metamorphose, and innovate in architecture.
With Morpheo, the buckets will contain between 50 and 80% recycled plastic.



High-performance millimetric hydraulic mortar intended to create a "Micro Concrete" type coating for interior and exterior decoration (floors, walls, bathrooms, worktops, objects, etc.).

This product, created over 25 years ago, was the world's first millimeter-thick Micro Concrete, an innovation made in France that has already enabled the creation of hundreds of thousands of square meters.

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

It is available in 71 colors (MORPHEO BLUSH CONCENTRATE).

This product constitutes the mass layer of the Morpheo M700 Classic system (refer to the System Sheet on the following page). It will be necessary to choose the preparation layer (primer) and the finishing layer (varnish, impregnation or wax) adapted to the uses and premises.

A maintenance guide presents the recommendations according to the finishes and uses.

Packaging
3-component kit

- Morpheo M700 Classic white base: component A / 18.8 kg
- Morpheo LPA binder: component B / 5.32 kg
- MORPHEO BLUSH CONCENTRATE: component C / 1.2 kg

The 7 key advantages of Marius Aurenti Micro Concrete:

- Without specific joint
- 15-year crack-free guarantee
- A range of high-resistance varnishes from matt to glossy
- Smooth to non-slip textures
- 71 mineral colors
- 2 mm thick
- 44 MPa

Features

The M3D Marius Aurenti System includes:
- a layer of preparation of the supports
- a mass layer
- a finishing coat

Refer to their respective Technical Data Sheet and Safety Data Sheet for each of them.

	SUPPORT	TRADE NAME	NUMBER OF LAYERS	TOTAL CONSUMPTION
SUPPORT PREPARATION LAYER	New and old hydraulic supports	Porous Soil Primer	1 to 2 coats depending on the porosity of the support	100 to 200g/m^2 depending on the porosity of the support
	Tiling	EPX2 Superior Primary + SQ10	1 to 2 coats depending on the surface	1 to 1.5 kg/m^2 of EPX Superior primer 1 to 1.5 kg/m^2 of sand
	Wood derivative (chipboard, MDF, plywood, etc.)	Wall Primer	1 layer	100 à 120 ml/m^2
MASS LAYER	New and old hydraulic supports Tiles Wood derivatives (chipboard, medium density fibreboard, plywood, etc.)	Morpheo M700 Classic Decorative Millimetric Mortar	2 to 3 layers	from 2kg/m^2 to 4 kg/m^2 (see consumption table P10)
PROTECTIVE LAYER	/	Pore Filler No. 5 + Varnish No. 7 Visco / Fixative IF3 / HL8	2 layers or ⩾ 3 layers	100 to 250 g/m^2 250 to 300 g/m^2 300 to 430 g/m^2 minimum

The Morpheo M700 Classic System is available in 71 colors from the IRIS Marius Aurenti color chart.

Eligible substrates

The diversity of substrates and their condition requires preparation and the use of specific primers. Consult our Technical Data Sheets. The substrates must be sound, flat, dry, rigid and cohesive, stable and clean (in particular free of grease, oils or laitance). They must be carried out in accordance with the DTU in force. It is important that the substrate has good cohesion and no cracks. Active cracks and expansion joints will be left open and will not be covered. They will be treated with the Marius Aurenti MS Polymer Color Joint after the M700 Classic Micro Concrete has been applied. The concrete and screed substrates must be at least 28 days old. They must be flat, cohesive, clean and have a moisture content < 4% or 0.5% for calcium sulfate-based fluid screeds.

A) NEW SUPPORTS BASED ON HYDRAULIC BINDERS

- Concrete slabs or adhesive screeds, meeting the specifications of standard NF DTU 26.2.
- Detached or floating slabs and screeds in cement mortar executed in accordance with the specifications of standard NF DTU 26.2.
- Cement-based fluid screeds subject to a favorable Technical Opinion/DTA in force for the intended area of use.
- Slab floors complying with the requirements of DTU 21 (standard P18-201) with continuity on support.
  - Solid reinforced concrete slabs cast in situ
  - Solid slabs cast on reinforced concrete pre-slabs
  - Solid slabs cast on prestressed concrete pre-slabs
- Ribbed floors with prestressed concrete (PC) or reinforced concrete (RC) beams and interjoists with a complete distribution slab cast in place with continuity on support.
- Floors made of hollow core slabs in BP or BA with added reinforced concrete slabs with continuity on support and with crack control in accordance with standard NF DTU 23.2.

Installations on hydraulic leveling compound, whether fibered or not, are excluded.
The support must be isolated from the earthworks and from rising damp from below and at the edges.

B) FLOOR SLABS, CONCRETE FLOORS ON CRAWL SPACES AND CONCRETE FLOORS POURED ONTO NEW STEEL DECKS

- Concrete slabs and concrete floors on crawl spaces must be carried out in accordance with standard NF P 11-213 (DTU 13.3); they must be reinforced in accordance with this same DTU.
- Concrete floors poured onto continuous steel decks must be executed in accordance with standard NF P 18-201 (DTU 21).

In the case of application on a support (concrete slab) smoothed with a helicopter, it is essential to first carry out mechanical surfacing of the surface, to ensure optimal adhesion of the primer and then of the Marius Aurenti Micro Concrete.

C) CALCIUM SULFATE-BASED FLUID SCREEDS

- Fluid screeds based on calcium sulfate must be executed and received in accordance with the currently valid Technical Opinion and the “Technical Specifications for the execution of fluid screeds based on calcium sulfate” (CSTB e-notebook 3578_V2).

D) OLD CAST FLOOR COVERINGS MADE FROM SYNTHETIC RESIN

- Old cast floor coverings based on synthetic resin meeting the requirements of CPT 3716 – “Execution of cast floor coverings based on synthetic resin – renovation”.

E) OLD TILES, MARBLES

- Existing tiles, in good condition, with good adhesion to the support (glued tiles).
Applications on outdoor tiles and paving are excluded.

In the case of tiled or marble surfaces, after prior surfacing with a diamond sander, EPX2 Multi Marius Aurenti Primer must be used, applied as mortar and then sanded to the desired consistency (please consult the Technical Data Sheet).

F) SUBSTRATES IN WET ROOMS

For applications in wet rooms (e.g. bathrooms), S.E.L (Liquid Sealing System) type seals must be applied before the system is installed. Any junction between materials of different types must first be treated with flexible waterproof seals.

For any shower type application, the support must have a slope > 2%.

In the case of installation on a WEDI shower tray, previously sealed with the WEDI waterproofing system, a primer must be used:

- or the EPX2 Superior Primer applied in mortar then sanded to the limit. The gelling agent for EPX2 Superior Primer can be used if necessary. (Consult the technical data sheets).

- or the TOP WEDI system (please consult the technical data sheet). Preparation of the TOP WEDI before applying the Marius Aurenti Micro Concrete is necessary to ensure good adhesion of the Micro Concrete. Consult our teams.

G) SUBSTRATES IN SWIMMING POOLS AND BASINS

In swimming pools and basins, the preparation of the supports being specific, as are the implementation methods, refer to the Marius Aurenti swimming pool guide.

H) OTHER SUBSTRATES

- Cellular concrete
- Wall plasterboard (excluding floor)
- Cement slabs
- Bricks
- Concrete blocks
- Wood derivative (chipboard, medium density fibreboard, plywood, etc.)

COLORS AND MIXTURES

To ensure consistency of color, for the same project, use the same batch number of component A and the same batch number of MORPHEO BLUSH CONCENTRATE.

MORPHEO BLUSH CONCENTRATE contains pigments, fillers, and additives in different proportions to achieve consistent rheology (fluidity and consistency) in the final product. Mixing concentrates is strictly prohibited.

Morpheo M700 Classic bases are semi-finished materials. It is essential to add a Morpheo BLUSH CONCENTRATE to them so that the properties of Morpheo M700 Classic are complete and the formula stable. Even in white color, the addition of a white MORPHEO BLUSH CONCENTRATE is mandatory. Using the base alone without adding the concentrate changes the nature of the product and reduces the chemical and mechanical performance of the system.
The product must be used by strictly mixing the 3 components.
Never add water.

USES

Use in saunas and hammams is excluded.
Do not apply to solid wood, soft wood floors, plastics and textiles, unglazed terracotta, floor tiles and gypsum fibre panels such as Fermacel.

STORAGE AND SECURITY

1 year in its original unopened packaging, away from sunlight and frost, at a temperature between +5° and 25°C, ideally between 15 and 20°C. Check the best before date on the packaging before use. Once opened, the product must be used within 7 days.
Use the appropriate personal safety equipment described in the Safety Data Sheets.
For further safety information, see the Safety Data Sheet.

Preparation is carried out using a dry mix (allows the kit to be used several times) or a wet mix (full use of the kit).

DRY MIX

When mixing dry, always mix the base and concentrate completely before dividing.

- Roll the base bucket to aerate and soften the material
- Open the base bucket and make a slight hollow in the center of the base
- Shake the concentrate jar and open it
- Pour the concentrate into the center of the base bucket
- Block the bucket with your feet and mix the base and the concentrate (ideally with a mixer for pasty products, contact us for prices)
- Immerse the blender and gradually increase the speed
- Continue mixing using vertical and lateral movements, both straight and inclined, to mix the contents perfectly. Pay particular attention to the edges at the bottom of the jar so as not to forget the most difficult corners to mix. During the first mixes, we recommend pouring the mixed contents into a bucket of the same size to visually check the quality of the mixture and repeat it if necessary. Mixing time should not be less than 1 minute
- Add component B (liquid) to the quantity of prepared powder: base (component A) + MORPHEO BLUSH CONCENTRATE perfectly mixed according to the instructions in the table below:

MORPHEO LPA BINDER COMPONENT B (LIQUID) IN KG	MORPHEO M700 CLASSIC + MORPHEO BLUSH CONCENTRATE (COLORED POWDER) IN KG	READY-TO-APPLY 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

Note: the preservation of the materials once mixed dry is not altered by the mixture if the buckets (base + concentrate) are closed and stored under the normal recommended conditions.

WET MIX

- Pour the liquid part (component B, 5.32 kg) into a clean, empty bucket
- Shake the Morpheo BLUSH CONCENTRATE jar and open it
- Pour the Morpheo BLUSH CONCENTRATE into the liquid
- Block the bucket and mix at progressive speed until the liquid and the concentrate are homogeneous.
- Add the powder (Component A) into the liquid.
- Mix mechanically for 2 to 3 minutes until a homogeneous mixture is obtained.

Never add water

HYGROMETRY

The application of the Morpheo M700 Classic System must be carried out in an ambient relative humidity range of between 30% and 80% except for varnishes which require a humidity range above 40% and below 80%, ideally between 50% and 65%.
Humidity conditions must be maintained for at least 48 hours after application of the final coat.
Protect from wind, direct sunlight, rain, frost and the environment, flora and fauna during application and setting of the components.

Before any application, check the humidity of the support (4% maximum humidity and ⩽0.5% for fluid screeds based on calcium sulfate).

TEMPERATURE

Before starting 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°C and + 25°C (ideal temperature: > 15°C and 20°C). It must be at least 3°C higher than the temperature corresponding to the dew point.
The Marius Aurenti Micro Concrete System can be applied at ambient temperatures between 5°C and 25°C for Micro Concrete and between 15°C and 25°C for varnishes, at least 24 hours before the first application and at least 24 hours after application of the last coat.
Low and high temperatures will slow and accelerate setting, respectively. Application should not be carried out in freezing weather or extreme heat. Provide heating or cooling systems if required by the job site.

APPLICATION MATERIAL

Trowel, 6 mm notched comb with triangular teeth (first layer only).

Smoother of the Parfait'Liss 35 cm type or stainless steel or plastic smoother 200 mm.
Sponge trowel or mason's sponge (dry) for a non-slip finish.

Cleaning tools with water.

Morpheo M700 Classic is made of a two-component mortar applied in a 2 mm thickness.

Apply a first coat of Morpheo M700 Classic with a consumption of approximately 3 kg/m² (approximately 1.5 mm thick) using a trowel or smoother.
To regulate the thickness, it is possible to apply the first layer using a 6 mm notched comb and then smooth it immediately with a smoothing iron until the notched comb streaks have completely disappeared.
In this case, smoothing must be carried out immediately, in the fresh Micro Concrete. This first layer determines the thickness and the final aesthetic effects.

Before applying the second coat and 24 hours after applying the first coat (at 20°C, 60% relative humidity), it is possible to sand the surface to remove decorative effects or marked irregularities (grain 40) using a single-brush machine (or an orbital sander), then thoroughly remove dust mechanically.

Apply the second coat with a consumption of approximately 1 kg/m², using a stainless steel trowel or smoother. This second coat determines the final grain of the coating and its aesthetic appearance.

It is important to note that a stainless steel application tool may leave dark marks (especially on light colors). A plastic tool may be preferred.

After 24 hours of drying (at 20°C, 60% relative humidity), sand the surface (grain 60 then grain 80) using a single-brush machine (or an orbital sander) then mechanically remove dust thoroughly.
The intensity of the sanding will finalize the surface appearance (grained or smooth) and bring out the material effects.
If the surface is deemed compliant, proceed with the application of the finishes.

4 possible finishes (refer to the Technical Data Sheets for these products):
Interior finishes:
- IF3 fixative
- Pore filler no. 5 + varnish no. 7 (combined use is mandatory to avoid whitening)
- Hydrolak HL8

Exterior finish:
- Terrace Impregnation No. 2

CONSUMPTION

DESTINATION	DETAILED DESCRIPTION	CONSUMPTION OF MICRO CONCRETE / M2	THICKNESS	SURFACE MADE FOR 1 KIT + BLUSH
Decorative dry wall	Interior wall on smooth support	2 kg/m² for 2 layers	approx. 1 mm	approx. 12m²
Residential flooring	Screed with or without heating in residential premises	3 kg/m² for 2 layers	approx. 1,5 mm	approx. 8,5m²
Intensive floor and walls	Interior or exterior paving Floor on screed of public buildings Old tiling on Epoxy Floor and wall receiving water Exterior wall on formwork concrete (excluding seafront) Furniture	4 kg/m² for 2 layers	approx. 2 mm	approx. 6,5m²
Swimming pools and ponds	Formwork concrete exclusively	8 kg/m² for 3 layers	approx. 4 mm	approx. 3,3m²

DRYING TIME AT 20°C AND 60% RELATIVE HUMIDITY

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

The surface should not be exposed to all stresses before the treatment system has completely dried, i.e. 7 days at 20°C and 60% relative humidity.

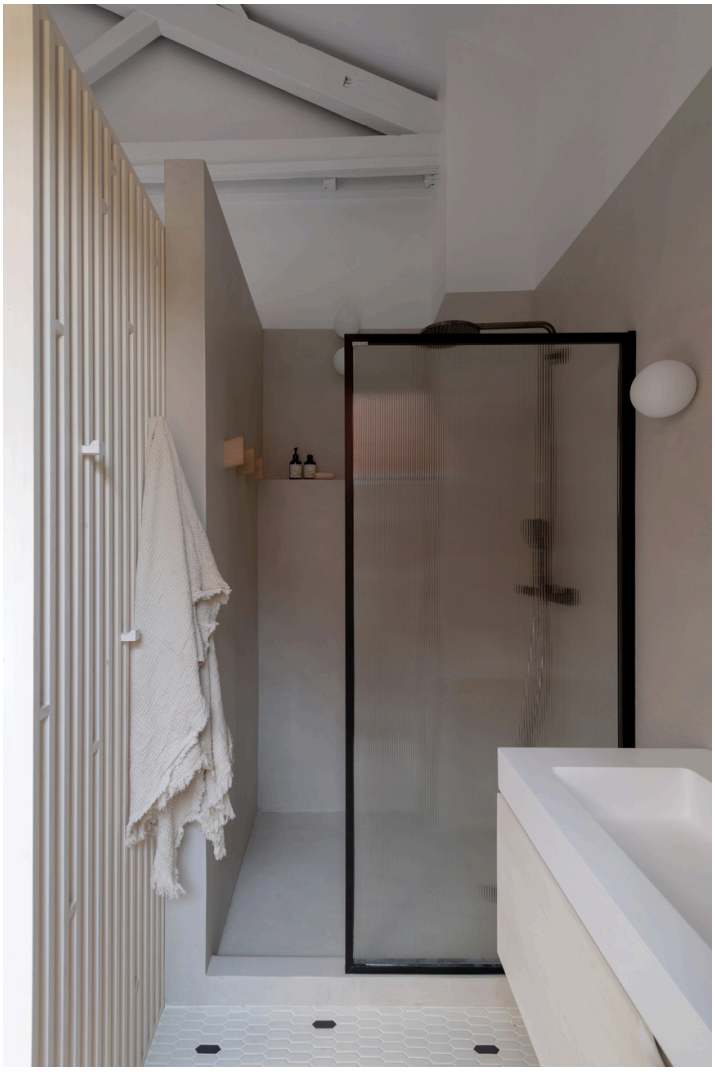
Between 2 and 7 days, light traffic may be permitted with the following precautions: micro-breathable protective tarpaulins such as Landolt Floorliner Vapor, and walking in socks or overshoes. No exposure to water or chemical agents should be carried out, and avoid rubbing and scratching furniture. It is prohibited to apply adhesives to the coverings.

Do not lay carpet for 7 days.

IMPORTANT NOTE:
The maximum hardness of the Morpheo M700 Classic System is obtained after 28 days of drying.

The floor must be accepted immediately after the work is completed. The newly installed Morpheo M700 Classic System will be protected from the work of other trades by protective materials that allow ventilation (see Technical Data Sheet for Visco Varnish No. 7, IF3 Fixative and HL8).

Time before first wet maintenance: 3 days minimum after applying Varnish No. 7, Fixative IF3 or HL8.
Follow the instructions in the Marius Aurenti maintenance booklet



Based on Test Reports from the CSTB (Scientific and Technical Center for Building), Test Reports from the LNE (National Metrology and Testing Laboratory) and Test Reports from the Marius Aurenti Laboratory.

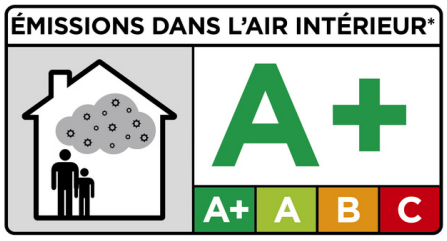
- CSTB n° RA12-0208
- CSTB n° RA20-0353
- CSTB n° R2EM-11-26022578
- CSTB n° R2EM-SIST-14-26047471
- CSTB n°ES541200113
- CSTB n° DSR-SIST-22-26085256
- LNE n°CX 1600936

The company Matières Marius Aurenti declares that the Marius Aurenti Systems: Morpheo M700 Classic and Morpheo M700F Fluid with Marius Aurenti varnish finishes meet the following performance requirements (pages 13-14-15), according to the implementation recommendations.

Bending strength (NF EN 13892-2)	16,8 N/mm²
Compressive strength (NF EN 13892-2)	44,1 N/mm²
Punching resistance (NF EN 13892-6)	293,5 N/mm²
Surface hardness (NF EN 13892-6:2003)	119,1 N/mm²
BCA wear resistance (NF 13892-8:2003)	0,08 mm
Impact resistance 1kg-200cm (NF EN ISO 6272)	No cracks
Adhesive strength (NF EN 13892-8:2003)	2.5 N/mm² Cohesive failure
Fire resistance (NF EN ISO 9239-1, NF EN ISO 13501-1 and NF EN ISO 11925-2)	Bf1-S1 (IF3, Visco n°7)
Slip resistance (Maximum values achieved related to application methods) (XP P05-010 and XP P05-011)	PN 24 PC 20
Water permeability (NF EN 1062-3:2003)	0.08 kg/m².h0.5
Determination of the rolling of a chair with casters (NF EN 425: 2012) 25 000 cycles, 21°C, 55% HR, Fixatif IF3	Residual traces in the roller passage area

STAIN RESISTANCE (NF EN 423:2002)

Index according to NF EN 423	**Test result after cleaning**
0	Insensible
1	Not very sensitive
2	Sensible
3	Very sensitive



**indoor air emissions*

MICRO CONCRETE + IF3 FIXATIVE

	Exposure time to reagents			
Reagents	5 minutes	2 hours	6 hours	24 hours
Café	0	0	0	0
Tea	0	0	0	0
Oil (peanut)	0	0	0	0
Vinegar	0	0	0	0
Lemon juice	0	0	0	0
Red wine	0	0	0	0
Demineralized water	0	0	0	0
Sparkling water	0	0	0	0
Shoe polish (black) *	0	0	1 (darkens pores)	1 (darkens pores)
Crushing out a cigarette*	1 (yellow spot)	1 (yellow spot)	1 (yellow spot)	1 (yellow spot)
Ammonia 15%	0	0	0	0
Acetone*	3 (white spot)	3 (white spot)	3 (white spot)	3 (white spot)
Bleach - Sodium Hypochlorite (12% solution)	0	0	0	0
Hydroalcoholic gel (70% ethyl alcohol)	1	2	3 (white spot)	3 (white spot)
Hydrochloric acid (20% solution)	0	0	0	0
Potassium hydroxide (30g/L solution)	0	0	0	0
Ammonium chloride (100g/L solution)	0	0	0	0
Sodium hydroxide (10% solution)	0	0	0	0
Acetic acid (5% solution)	0	0	0	0
Acetic acid (10% solution)	0	0	0	0
Ballpoint pen ink *	3	3	3	3

MICRO CONCRETE + VARNISH NO. 7

	Exposure time to reagents			
Reagents	5 minutes	2 hours	6 hours	24 hours
Café	0	0	0	0
Tea	0	0	0	0
Oil (peanut)	0	0	0	0
Vinegar	0	2 (darkens the shade)	2 (darkens the shade)	2 (darkens the shade)
Lemon juice	0	0	0	0
Red wine	0	0	0	0
Demineralized water	0	0	0	0
Sparkling water	0	0	0	0
Shoe polish (black) *	0	0	0	0
Crushing out a cigarette*	1 (yellow spot)	1 (yellow spot)	1 (yellow spot)	1 (yellow spot)
Ammonia 15%	0	0	0	0
Acetone*	1 (white spot)	1 (white spot)	1 (white spot)	1 (white spot)
Bleach - Sodium Hypochlorite (12% solution)	0	0	0	0
Hydroalcoholic gel (70% ethyl alcohol)	3 (white spot)	3 (white spot)	2	2
Hydrochloric acid (20% solution)	0	1 (darkens the shade)	2 (darkens the shade)	2 (darkens the shade)
Potassium hydroxide (30g/L solution)	0	0	0	0
Ammonium chloride (100g/L solution)	0	0	0	0
Sodium hydroxide (10% solution)	0	0	0	0
Acetic acid (5% solution)	0	0	0	0
Acetic acid (10% solution)	0	2 (darkens the shade)	2 (darkens the shade)	2 (darkens the shade)
Ballpoint pen ink *	3	3	3	3

(*): Study carried out on a panel of 12 recognized varnishes from the Micro Concrete market.

From 2 hours of exposure:
Between 85% and 95% of varnishes on the market have vinegar or acetic acid stains (10% solution)

From 5 minutes of exposure:
More than 65% of varnishes on the market show acetone stains More than 75% of varnishes on the market show cigarette stubbing stains
100% of the varnishes tested are sensitive to ballpoint pen ink

CE conformity marking, defined by Directive 93/68/EEC:

CE

OCEAN Marius Aurenti
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BP 21034
26958 Valence cedex 9 FRANCE
17

EN 13813

MA's Micro Concrete

Reaction to fire: Bf1S1
Compressive strength: C40
Flexural strength: F15
Wear resistance: AR1
Adhesion strength: B2.0

MARIUS AURENTI

For 40 years, Marius Aurenti has been innovating to improve the performance of decorative materials and the sensations they provide.

A mineral and plant-based aesthetic, close to Nature, to which our works pay homage and for which our environmental commitment is total.

MA's is also present, through its training and support, alongside quality French craftsmanship which, every day in our workshops and on the ground, strives to make each place unique, beautiful and timeless.

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