

# BI AQUA VARNISH SYSTEM

## IMPREGNATOR SEALER (1) + BI AQUA VARNISH (2)

### PRODUCT DESCRIPTION

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Bi Aqua Varnish System includes 2 finishing products for decorative concretes:

- 1- Impregnator Sealer
- 2- Bi Aqua Varnish (Components A+B)

Both products are ready-to-use liquids:

1) **IMPREGNATOR SEALER** is white non-toxic water-based liquid.

It is used as an impregnator before varnish.

It hardens concrete surface and enforces the crystalline structure of the concrete forming mineral components of high firmness.

It increases waterproofing qualities of the surface by filling the pores between the grains.

It helps avoid traces of tools that appeared after former application of solvent-based products.

Can be applied in 2 to 3 layers.

2) **BI AQUA VARNISH** is a protective polyurethane varnish consisting of 2 components (component A varnish + component B hardener). Showing good elasticity and adherence qualities, the system creates a mechanically and chemically high resistant protection.

It creates an extremely resistant protection film.

It is easy to apply due to its consistency, low odour and quick drying.

Its finishing is semi-matt.

In general it is applicable in 2 layers. The 3rd layer might be necessary depending on the quantity of varnish placed on previous layers.

The hardness and the protection quality depend on the respect of the implementation of the concrete (check the surface, drying time, smooth and regular application).

\*wine, soda, ink, alcohol, oil, bleach.

### APPLICATION AREA/SURFACE

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- Indoors
- Countertops
- Floors with high traffic
- Shower walls
- Shower floor: CAUTION, do not leave stagnant water several days (the slope must be sufficient to keep the water flowing). Use a squeegee.
- It might be damaged by vinegar, coffee, anti limescale solution
- Refer to our Finishers Overview table to chose a product most adapted to your (available on our website or at our distributors').

## NECESSARY TOOLS

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- IMPREGNATOR SEALER: varnish brush, spalter.
- BI AQUA VARNISH: microfiber roller (10 mm), extension pole if applied on floors.
- How to clean the tools: immediately after use.

## SURFACE PREPARATION & PRIMERS

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- On a new decorative concrete, at 20°C the surface must be at least 5 days old or must have reached a residual moisture inferior to 1%. The surface must be clean, dry and free of oil, grease or laitance traces. A profound vacuum cleaning is necessary.
- On a decorative concrete that must be renovate, the process can differ according to the surface condition (please contact us).

## MIX PREPARATION

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- IMPREGNATOR SEALER: ready to use.
- BI AQUA VARNISH:

Leave the 2 components at the room temperature

Shake well varnish cans and hardener cans.

Mix the varnish and the hardener keeping to the following proportions:

4 parts of varnish (component A) with 1 part of hardener (component B)

It's the hardener that must be added to the varnish and not vice versa.

Leave the mix to stand 5 minutes to avoid bubbles.

For example:

800 ml of varnish component A + 200 ml of hardener component B

4 litres of varnish component A + 1L of hardener component B

Caution: the mix can be used only within 1 hour (at 20°C/60% of humidity). Thus, do not mix varnish + hardener in quantities that cannot be used within this time.

Tightly close the hardener after use.

If the temperature is elevated, the longevity of conservation of the mix in a container will decrease considerably.

Do not close hermetically the container with the mix: it will react within the container forming reaction gas.

## APPLICATION

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**CAUTION:** in case of under floor heating, we recommend to switch off it 48h before and for any amount of the implementation time. Restart it progressively 48h after the end of the application.

### Step 1 : IMPREGNATOR SEALER

- Room, surface and product temperature for product application must be between 12 and 30°C.
- The product is applied with a varnish brush (spalter) in a uniform way. For walls, from the bottom to the top to avoid spilling.
- Applied in 2 or 3 layers (depending on porosity and surface of the concrete coating). The number of layers is emblematic. Indeed, we recommend to respect the performance of the products and to adjust the number of layers for a better performance of the system.
- Drying time: away from dust for 30 min at 20°C.
- Do not overcharge the surface with the impregnator sealer (risk of whitish traces), but apply in several levels until the product cannot penetrate any more. Do not leave any 'puddles'.
- Can be covered after 1 to 4 hours depending on the temperature between the layers.
- Leave to dry for 24 hours minimum at 20°C before application of Bi Aqua Varnish.

### Step 2 : BI AQUA VARNISH

Application temperature: + 15°C to + 25°C. / Surface temperature: 12°C / Residual moisture : <1% / Air relative humidity between 35 and 65%.

Place all the layers at the same day with a 2 hours' interval between the layers (minimum).

Maintain sufficient air circulation and keep it out of the sun.

1st layer: Cross the application

Place the first layer with a microfibre roller 10 mm in a uniform way.

Start from the side with better lighting and place the product moving away from the light to observe the surface and rectify as soon as you notice a badly covered spot. Never leave 'puddles'.

2nd layer:

Place the 2nd layer in the same way as the 1st one.

Place the 3rd layer in the same way if necessary, depending on the amount of varnish placed on previous layers.

Do not exceed 24 hours' interval between the layers. In case you exceed the waiting time sanding and vacuum are obligatory.

### Tips:

Pour the product into a coating pan/bucket: never pour it directly onto the surface.

The area must be sufficiently aerated, but avoid any draughts and direct sunlight during application and drying process.

**CAUTION:** dust can appear on the surface and stop the adherence of the varnish.

The varnish should be placed onto the sides and frontiers of your area at the same time as over the main zone to avoid the traces of a roller.

## FINAL DRYING

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Dry to touch: 2 hours\*.

Allowed to step on: 24 hours\* after the last layer of varnish.

The surface will be in service for regular use from 1 week to 10 days\*.

The system Decorative Concrete + Sealer will achieve its maximal hardness after 28 days.

During the first 10 days after application:

- Do not cover with films, carpets.
- Do not move heavy furniture.
- Apply only dry cleaning: never moisten.

\* in the climatic conditions mentioned overhead in step 2.

## ROUTINE MAINTENANCE / RENOVATION

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Regular maintenance is necessary.

Its frequency varies depending upon the use of the area and a chosen sealer.

In order to preserve the product and sealer, we advise to:

Place the felt pads under the legs of the furniture, chairs etc.

Not to leave any coloured water spots or grease stains... Wipe them out as soon as possible (within 30 minutes)

- Coloured products (such as hair dye, disinfectant dye etc) as well as migration of plasticizers (such as rubber) might lead to irreversible coloration of protective layer while mechanically caused deterioration may accelerate the varnish wear.
- Isolate flowerpots.
- For regular maintenance use MERCADIER «Intensive Cleaner Before Aqua Varnish Restoration».
- To remove stains use MERCADIER «Stain remover».
- Avoid any ammonia-based or any concentrated anti-limestone products.
- It is important to maintain the surface applying regularly a layer of the last sealer or a mineralising coating (please contact us).

## YIELD & PACKAGING & CONSERVATION

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IMPREGNATOR SEALER:

- Coverage: 70 ml and 90 ml/m<sup>2</sup> per layer.

Format: cans

- 500ml (up to 3,6m<sup>2</sup> for 2 layers)
  - 1 L (up to 7.1 m<sup>2</sup> for 2 layers)
  - 2 L (up to 14.3 m<sup>2</sup> for 2 layers).
  - 5 L (up to 35.8 m<sup>2</sup> for 2 layers).

**BI-AQUA VARNISH:**

- Coverage: 100g per m<sup>2</sup> per layer

-Format:

Cans of 800 ml of varnish + 200 ml hardener: 10m<sup>2</sup>

Cans of 4 litres of varnish + 1 litre of hardener: 50m<sup>2</sup>

- The cans can be stored for one year in its original unopened packaging in a place protected from the frost, heat (5°c-30°c) and moisture.

**ASSOCIATED PRODUCTS**

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Layered Decorative Concrete (EBC), Trowelled Concrete (TC), Pure Minéral Béton (PMB).

Concrete Look Seamless Floors: self-levelling (INDUX-RBX) and self-smoothing (SOLIX-SC+)

Intensive Cleaner Before Aqua Varnish Restoration

Stain Remover, Cleaning shampoo.

**RECOMMENDATIONS AND SAFETY PRECAUTIONS**

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See the most recent version of this technical data sheet (see website). Our distributors and technical support are also at your disposal for any clarification.

Performance and durability guarantee for the decorative coating may be given only in case a complete system of MERCADIER products is used (primer, product itself, sealer) and strictly according to instructions for application and maintenance of the system. Thus, the manufacturer will not be liable for poor product's performance if an application did not conform to our instructions and if the integral system was not used.

All the information, tips and advice related to the final illustration of MERCADIER products are given in good faith. They are based on the knowledge and experience that MERCADIER has acquired so far regarding its products that were appropriately stored and handled and applied in normal conditions. In practice, the differences between materials, surfaces and specific application conditions are such that provided information, written recommendations or given advice do not imply any warranty of merchantability other than the legal warranty against hidden defects.

Colors and aspects in our color charts are indicative and cannot be considered as contractual. The same applies for boards and panels displayed at retail outlets. It is preferable to use identical samples as much as possible. These products lead to results with subtle differences that can also arise depending on application conditions (applicator's gestures, temperature etc..).

**HYGIENE AND SAFETY**

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**Bi Aqua Varnish Component A :**

Components: aqueous dispersion of synthetic resins, solvent free

**Hardener Varnish Component B:**

Components: Hexamethylen-1,6-diisocyanat Homopolymer.

Directive 2004/42/CE: Limit value authorised in European Community in the product (Cat. A/j) : 140 g/l (2010). Ready-to-use product contains 20 g/l VOC. Close containers immediately after use, empty them quickly. Safety Data Sheet can be given on request. Keep locked and out of children's reach. Treat emptied cans as special waste and dispose of them only if they are fully emptied. Available only in specialised selling points. Shake well before application. Store in original container in a place protected from moisture, temperature between +5°C and +30°C. Protect from the frost.

Dangerous components for determining for labeling:

Polyisocyanate aliphatique and cyclohexyldimethylamine.

### DANGER INFORMATION

H332 Harmful if inhaled

H317 May cause an allergic skin reaction.

H335 May cause respiratory irritation.

H412 Harmful to aquatic life with long lasting effects

### SAFETY ADVICE

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P280 Wear protective gloves / protective clothing / eye protection / face protection.

P302+P352 IF ON SKIN: wash with plenty of soap and water

P333+P313 If skin irritation or rash occurs, get medical advice/attention

P305+P351+P338 IF IN EYES rinse cautiously with water for several minutes, remove contact lenses, if present and easy to do. Continue rinsing.

P304+P340 IF INHALED remove victim to fresh air and keep at rest in a position comfortable for breathing.

P310 Immediately call a POISON CENTER or doctor/physician

P342+P311 If experiencing respiratory symptoms call a POISON CENTER or Doctor/physician

### ADDITIONAL INSTRUCTIONS

EUH204 Contains isocyanates. May produce an allergic reaction

EUH208 Contains 1.2-benzisothiazol-3(2H)-one. May produce an allergic reaction.

### SAFETY / PRECAUTIONS

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Refer to the product Safety Data Sheet



In accordance with the new French regulations that establish limit value for the VOC (Volatile Organic Compound) present in constructions materials, this product MERCADIER respects the environment. This regulation states that construction and decoration products must be provided with a label indicating the level of volatile organic compound emission in a simple and readable way.

\*Information on the level of emissions of volatile substances into indoor air, presenting a risk of toxicity by inhalation, on a class scale from A+ (very low emissions) to C (high emissions).

The information contained in this data sheet is based on our knowledge and on test results. It may under no circumstances be considered as providing a guarantee, nor as engaging our responsibility in the event of faulty application.