

## Biosphere Premium

Version: oct-17

*Biosphere Premium* is a natural paint with graphene technology for exteriors. It is ideal for decorating facades creating an entirely matte mineral finish in white. Application in construction, restoration and repainting. It creates healthier spaces inside your home, guaranteeing the breathability and health of the building.

### PRODUCT DESCRIPTION

#### Features:

High covering power.  
Over 98% whiteness.  
Absorbs CO<sub>2</sub> (4.8 kg/15 l).  
Natural matt finish.  
Contains high quality lime and graphene fibres.  
Breathable. Avoids condensation.  
Good washability.  
Tough and long-lasting. High adherence.  
Excellent flexibility. Not cracking.  
Free of VOCs and formaldehyde emissions.  
Cradle to Cradle Certified™ GOLD.  
GreenRate™ LEVEL A

#### Technical properties:

Specific weight	ISO 2811-1	1.37 ± 0.05 g/cm <sup>3</sup>
pH	-	12.5 ± 1
Viscosity	UNE 48076	[90 - 130] U.K.
Solid content	-	59 ± 5 %
SRI	ASTM E1980-11	100 ± 0.3
LRV	BS8493+A1	89.4%
Washability	EN 13300	Class 1
Permeability to water vapour	EN 1062-1	Class 1 S <sub>D</sub> < 0.14 m
Capillary water absorption	EN 1062-1	Class 3 w < 0.01 kg/m <sup>2</sup> ·h <sup>0.5</sup>
Adhesion pull-off strength	EN 1542	> 2.5 N/mm <sup>2</sup> (flexible system)
Fire performance	EN 13501-1	A1
Nature	-	Aerated lime
Appearance	-	Dense liquid
Finish	-	Matte
VOC content	ASTM D2369-10	< 1 g/l
VOC emissions	ISO 16000-3/-6	Class A+

#### Yield:

6-9 m<sup>2</sup>/l (2 coats). It depends on the type and condition of the substrate. The exact consumption must be determined by the means of a sampling of the work.

#### Colours:

White matte

#### Format:

Available in pots of 1 l, 4 l, 12.5 l, 15 l.

#### Storage:

Keep in original pack, closed and in a cool and dry place. Keep from freezing and avoid direct sun exposure. Unopened, it may be conserved for at least 12 months from the date of manufacture. The product may thicken without losing its properties; shake well before use.

### APPLICATINO INSTRUCTIONS

#### Application surfaces:

It can be applied on all types of surfaces common in construction: mortar, brick, concrete, old paintings, etc.

#### Conditions of the substrate:

The substrate must be dry, firm, well-adhered and free from any impurities that may hinder the product from setting fully.

#### Preparation of the substrate:

If the substrate presents algae, mold, fungi and / or other impurities, it is recommended to do a thorough cleaning, eliminating in its entirety and with specific products for this purpose.

If the substrate has poor adhesion (sandy, dusty, etc.), brush and consolidate with *Minerseal Premium* diluted 3:1 with water.

If the substrate has salt deposits, brush and apply *Neutralysal Premium*.

If the substrate contains a high moisture level, apply *StopWater Premium* diluted 1:1 with water and paint 24 hours before its application.

If the substrate has different absorptions, irregular textures and/or strong natural or artificial colour, apply *Filler Premium*. In the case of micro-cracking and/or scaling/blistering of existing paint, first remove areas that do not adhere by scraping and brushing.

If the substrate presents surface cracks, the recommendation depends on the width of the crack:

1-3 mm	Apply <i>Füllmasse Premium</i> (with a fiberglass mesh if >1 mm).
3-10 mm	Chip superficially and apply <i>Naturglue Premium</i> with mesh
>10 mm	Requires architectural assessment.

If the substrate presents deterioration of mortar, first remove areas that do not adhere by scraping or pricking and clean up by brushing or plenty of water. The recommendation depends on the damaged depth:

< 3 mm	Apply <i>Ecoputty Premium</i> .
3-8 mm	Apply <i>Naturglue Premium</i> with mesh.
8-20 mm	Apply <i>MortarBase Premium</i> and finish with <i>MortarFine Premium</i> (<10 mm) with mesh.
>20 mm	Apply <i>Naturglue Premium</i> (5 mm), apply tile according to width of the cavity (1-5 cm) and apply <i>Naturglue Premium</i> (<10 mm) with a mesh.

If the substrate presents pathology such as structural cracks, moisture by capillarity, condensation or filtration, etc.; then it is necessary to resolve the structural problems first.

Depending upon the nature of the substrates, the previous actions vary as follows:

- Old glossy paint or putty: clean surfaces and sand slightly.
- Absorbent substrates (ex. cement blocks, brick, plaster, etc.): apply *AmbientPrimer Premium*.
- Very absorbent substrates (clay, adobe, rammed earth, etc.): apply *Minerseal Premium*.
- If the substrate is wood or metal (without corrosion or oxidation) or without porosity: apply *Four2Four Premium*.

### Product preparation:

Stir and dilute with water to 10-15% of the product weight (150-200 ml of water per liter of product approx.), ensure a homogeneous mixture. Avoid excessive shaking to minimize bubble occlusion.

### Application method:

Apply 2 or 3 coats evenly. Paint in sections starting with the borders. Without soaking the paint roller, pass the roller to spread out the paint correctly. Do not paint on areas that are drying, avoid overlapping. An excess of product by layers can generate micro-cracks.

### Drying:

In conditions of 25 °C and 60% relative humidity: 2-4 hours between layers and 24 hours drying.

The carbonation process mainly occurs during the first 30 days. It is recommended to avoid cleaning and/or rubbing during that time.

### Environmental conditions:

The work temperature (environment and substrate) must be between +5 °C and +32 °C. Do not apply in direct sunlight or on supports heated by the sun.

### Tools:

Roller, brush, airless or other type of projection.

### Airless application:

Spray angle: 30°

Spray distance: 50-60 cm

Tip size: 0.027 in.

Minimum strength of machine: 1750 W

Machine filter: 30-40 mesh.

### Tool cleaning:

Clean tools after use with warm water.

### Notes

The mineral substrate must be at least 28 days old.

The substrates to be painted must be resistant to high alkalinity.

Do not apply to surfaces in constant contact with water.

In case of rain, let the substrate dry before applying.

It is recommended to protect the treated surface from rain for at least 4 days.

In tropical areas or high contaminated area, *Hydroxeal Premium* is recommended to minimize the absorption of water and impurities.

To carry out decorative glazing and / or colocation of self-adhesive templates or other types of masking; dry for 36 hours.

The parts that are not going to be treated must be protected (glass, wood, etc.).

Should there be strict aesthetic requirements, it is recommended to perform prior tests.

Do not mix with other products or specific properties may change.

#### Complementary products:

It is recommended to use the *Graphenstone®* product line for complementary actions, according to the required application, repair and/or finish. Please, refer to the relevant Technical Data Sheets.

#### DECLARATIONS

The product has the following certifications: Cradle to Cradle Certified™ GOLD, GreenRate Level A, Product Environmental Declaration and CE mark "Concrete surface protection product, flexible system EN1504-2: Moisture control".

The manufacturer declares that the composition of the product, it does not contain hazardous substances and it is free of VOC emissions.

For more information, please refer our website: <http://graphenstone.com/Graphenstone-Global-Certificados.html>

#### ADDITIONAL INFORMATION

##### Usage warnings:

None in particular for normal use and people who do not have special pathologies. Alkaline product, protect skin and eyes especially. Apply with good venti-

lation, do not inhale product. Keep out of reach of children.

##### Waste management:

According to local legal provisions. The pots are made of recycled polypropylene. Help protect the environment, do not throw waste through the drain and use the nearest recycling centre.

##### Responsible gesture:

Minimize the product waste by estimating the amount you will need. Recover the unused mortar to give it a new use, keep it under the Storage section.

##### Safety information:

For information regarding safety, physical, ecological and toxicological information see the latest version of the product's Material Safety Data Sheet.

##### Technical support:

For further information, please contact with local distributor or manufacture:

[technicalsupport@graphenstone.com](mailto:technicalsupport@graphenstone.com)