



## Biosphere Premium

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*Biosphere Premium* is a natural exterior paint, it contains graphene and is available in a white matte finish. It is ideal for construction, restoration and repainting. It reduces condensation and delays degradation of buildings, increasing the value of the property.

### PRODUCT DESCRIPTION

#### Where to apply:

Ideal for decorating façades helping to create a healthy indoor environment. Also, suited for restoration of Listed Properties, all types of restoration work or contemporary buildings.

It is recommended for exteriors of homes, museums, hospitals, crèches, shops, hotels, etc.

#### Features:

- High hiding power.
- Over 98% whiteness.
- Absorbs CO<sub>2</sub> (4.8 kg/15 l).
- Natural matte finish.
- Contains high quality lime and graphene fibre.
- Antibacterial/anti-mould effect.
- Insect repellent.
- Breathable. Avoids condensation.
- Washability.
- Tough and long-lasting.
- Excellent flexibility. Not cracking.
- High adherence.
- Free of VOCs and formaldehyde emissions.
- Cradle to Cradle Certified™ GOLD.

#### Components:

Rich aerated lime\*, water, selected aggregates, graphene fibre, thickeners, stabilisers and specific dispersants. Complies with the requirements of the standard DIN 18363 (≤ 5% of organic content).

*\*Derived from CL90-quality limestone and artisanal production recognised by UNESCO as Intangible Cultural Heritage of Humanity.*

#### Format:

Available in pots of 1 l, 4 l, 12.5 l y 15 l. Inquire about other formats.

#### Technical properties:

Specific weight	ISO 2811-1	1.37 ± 0.05 g/cm <sup>3</sup>
pH	-	12.5 ± 1
Viscosity	UNE 48076	92 ± 5 K.U.
Solid content	-	59 ± 5 %
SRI	ASTM E1980-11	100 ± 0.3
LRV	BS 8493+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	0.81 N/mm <sup>2</sup> (flexible system)
Reaction to fire	EN 13501-1	A1
Thermal cond.	EN 23993	0.1 W/m·K
Appearance	-	Dense liquid
Finish	-	Matte
VOC content	ASTM D2369-10	< 1 g/l
VOC emission	CS 01350	n.d.*

\*For more information, see the Declaration section.

#### Yield:

Coverage depends on the type, texture and absorption of the substrate. As an estimate, we consider 6-9 m<sup>2</sup>/l (2 coats). The exact consumption must be determined by means of a sample of the job.

#### Colours:

Offered in matte white. For coloured paint, please refer to *GCS Exterior Premium*.



## 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. The product may thicken without losing its properties; shake well before use.

## APPLICATION INSTRUCTIONS

### 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 contains impurities, it is recommended to clean it with pressurised water. Should there be colonies of mould, lichens, algae and bacteria, brush with sodium hypochlorite (bleach) and wait at least 48 hours before painting.

If the substrate is 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*.

If the substrate has different absorptions, irregular textures and/or strong natural or artificial colour, apply *Filler Premium*.

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

<1 mm	Apply <i>Filler Premium</i> .
1-3 mm	Apply <i>Füllmasse Premium</i> (with a fibreglass 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 scaling/blistering of the existing paint or mortar, the recommendation depends on the depth of the deterioration:

<1 mm	Scrape, brush and apply <i>Filler Premium</i> .
1-3 mm	Scrape, brush and apply <i>Ecoputty Premium</i> .
3-8 mm	Wash with plenty of water, dry (24 hs) and apply <i>Naturglue Premium</i> with mesh.
8-20 mm	Clean with plenty of water, dry (24 hs), apply <i>MortarBase Premium</i> and finish with <i>Mortar-Fine Premium</i> (<10 mm) with a mesh.
>20 mm	Clean with plenty of water, dry (24 hs), 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 contains pathologies such as moisture due to capillarity, condensation, leak, biodeterioration or movements of the substrate, etc., then it is necessary to resolve the structural problems first.

Depending upon the nature of the substrate, the recommendations listed above may vary as follows:

- Absorbent substrates such as cement blocks, brick: apply *Filler Premium*.
- Very absorbent substrates such as clay, adobe, rammed earth: apply *Minerseal Premium*.
- Substrate with no porosity such as glazed tiles, phenolic panels, epoxy or polyurethane paints: apply *Four2Four Premium*.
- Wood or metal substrates (without corrosion or oxidation): apply *Four2Four Premium*.

### Product preparation:

Dilute with water at 10-15% of the product's weight and shake/mix well to ensure an even consistency.

### Application method:

Apply 2 or 3 coats evenly. Do not apply too thickly or micro-cracks can appear. Paint in sections starting with the borders. Avoid overlapping.

### Drying:

In conditions of 25 °C and 60% relative humidity, wait 2-4 hours between coats, and 24 hours for drying.

The physical and chemical hardening (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 greater than +5 °C and less than 32 °C. Do not apply in direct sunlight, nor on support 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 indicated times are for environmental conditions of 25 °C and 60% relative humidity.

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 for at least 48 hours before applying.

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

In tropical or high pollution areas, *Hydroxéal Premium* is recommended as a top coating to minimise water absorption.

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 apply decorative glazing and/or self-adhesive templates or other kinds of masking, until 36 hours has past.

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 manufacturer declares that the product has the following certifications:

- Cradle to Cradle Certified™ GOLD (certification no. 2788).
- CE Marking “Product of superficial cement protection, flexible system EN1504-3:2005” (certification no. 1170/CPR/ER.03117).
- Carbon footprint 0.007 tn CO<sub>2</sub>e/15l according to PAS 2050:2011 (certification no.1411-13-01,1).

The manufacturer declares that the product meets the criteria according to California Specification 01350 and EU Ecolabel in accordance with Committee Decision of August 13, 2008 (ecoLabel).

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

## 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. Do not inhale product. Keep out of reach of children.

### Waste management:

According to local legal provisions. The packages are made of recycled polypropylene.

### Safety information:



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

**Technical substrate:**

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

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

The information provided is given in good faith, based on current knowledge and IEdiSA's experience with the products when they are properly stored, handled and applied in normal situations and in accordance with the recommendations of IEdiSA. The Technical Specifications sheet is useful for information and consulting, but is not legally binding. In particular, it does not exempt the user from testing and verifying the suitability of the product for the desired application and purpose. IEdiSA reserves the right to modifications that improve the product or its application. This version invalidates previous ones.

