

## Biosphere

Lime exterior paint

### TECHNICAL DATA SHEET

Biosphere is a mineral, ecological matt paint, suitable for exterior walls. Thanks to its formula based on 100% artisanal lime, the product absorbs CO<sub>2</sub>\* as it cures and it has an excellent breathability that helps to prevent condensation. Made with Graphenstone Technology for greater resistance and durability.



### FEATURES

- High covering power
- Absorbs CO<sub>2</sub> during carbonation (28 days)
- Natural matt finish
- White, pastel and Soft Selection colours
- High quality lime and Graphenstone technology
- Breathable
- High adhesion, strength and durability
- Excellent flexibility
- CE Marking\*
- High SRI rating\*. Improved energy efficiency
- Global Green Tag LEVEL B, Platinum Health
- Environmental Product Declaration
- Ecolabel\*
- Cradle to Cradle Certified™ GOLD\*/SILVER
- \* Certificates for Biosphere White

### PACK SIZE

1L, 1 Gal, 4L, 10L, 15L and 5 Gal

### TECHNICAL PROPERTIES

### YIELD/COVERAGE

White: 5-7 m<sup>2</sup>/l | 200-285 Sq. Ft./gal (2 coats).  
Colours: 6-8 m<sup>2</sup>/l | 250-325 Sq. Ft./gal (2 coats).

Depending on the condition of the substrate, tools and application. The exact consumption should be determined by sampling on site.

### CE MARK

EN1504-2 Surface protection system for concrete -  
Moisture control:

Adhesion strength  $\geq 0.8 \text{ N/mm}^2$   
Permeability Class 1  
Water absorption from capillarity  $w < 0.1 \text{ kg/m}^2 \cdot \text{h}^{0.5, ++, y, h}$

	White	Colour
Specific weight	$1.47 \pm 0.05 \text{ g/cm}^3$	$1.48 \pm 0.05 \text{ g/cm}^3$
pH	$13 \pm 0.5$	
Viscosity	[80 - 120] U.K.	
Solid content	$57 \pm 5 \%$	$60 \pm 5 \%$
Washability (EN 13300)	Class 1	
SRI (ASTM E1980-11)	$100 \pm 0.3$	
LRV (BS8493+A1)	89,4%	
Water vapour permeability	$V \geq 600 \text{ g/(m}^2 \cdot \text{d)} \mid S_d \leq 0,03 \text{ m}$	
Nature	Aerated lime	
Appearance	Dense liquid	
VOC s Content	PASS according to Directive 2004/42/CE and EU Ecolabel (2014/312/EU)	



## STORAGE

Store in original container. Keep tightly sealed in a cool and dry area with no direct exposure to sunlight. Protect from freezing. Protect from temperatures below 5°C (41°F) and above 35°C (95°F). Unopened, storage stability is 24 months from date of manufacture. Product may thicken without losing its efficacy. Shake well before use.

## SUBSTRATE PREPARATION

New or previously painted renders, plaster, brick, stone and concrete.

The substrate must be well adhered, free from impurities, clean, dry and dust free. Rake out any cracks and repair using the appropriate and compatible fillers.

Lightly sand down any shiny surfaces and prime where required.

- On absorbent substrates, apply 1 coat of Ambient Primer.
- On wood, metal or non-porous substrates apply Four2Four multi-surface primer.

If the substrate presents any complications, it may be necessary to conduct site trials onto surfaces to test and confirm suitability. Check the Graphenstone Application Manual or contact our Technical Department.

## PRODUCT PREPARATION

Shake and dilute with 5-10% water.

Stir thoroughly before and during use. Avoid excessive shaking to minimise bubble occlusion.

## APPLICATION METHOD

Apply 2 or 3 coats evenly, maintaining a 'wet-edge' to avoid lap marks. Cut in and roll one wall at a time, using the same dilution rates. Roll as close to the edges as possible to minimise picture framing.

Take care not to apply the paints too thickly, which can affect curing times and can cause micro cracking.

The natural mineral bases benefit from being rolled and worked out well. This will help you to achieve a rich and even finish.

## CURING

Full opacity and coverage of the lime paints will be achieved after the first 3-4 days. You may initially think the paint seems a little patchy. Do not rush to apply extra coats; allow the paint to cure.

## DRYING

At 25°C and 60% relative humidity (RH), allow 1 hour for touch dry, 2-4 hours between coats and 24 hours for full drying. Please note, changes in temperature and RH will affect these times.

Please protect from rain, condensation and water for 4-5 days, to allow the paints to initially cure (including in kitchens/bathrooms/showers).

Full cure is achieved in around 30 days, after which the paints are durable to Class 1. Avoid rubbing or cleaning during this time.

## AMBIENT CONDITIONS

The working temperature (ambient and substrate) must be between 7 °C and 35 °C (41 °F and 104 °F). Do not apply under direct sunlight or on surfaces heated by the sun.

## TOOLS

Medium pile roller, brush or airless\*.

- recommended tips 415 - 517
- recommended pressure - 1800 - 2000 psi
- recommend thinning – up to 10%

Clean tools after use with warm water.

## NOTES

Mineral substrates must be at least 28 days old.

Do not apply to surfaces in permanent contact with water. In case of rain, let the surface dry completely before application.

Please protect areas not being painted eg: glass and timber. If using more than one pot of the same colour, or differing batches, please intermix before using to maintain an even and consistent colour.

Should there be any strict aesthetic requirements, it is recommended to carry out preliminary tests.

Do not mix with other brands to maintain product efficacy.

## COMPLEMENTARY PRODUCTS

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

## USAGE WARNINGS

None, particularly in situations where normal product application is expected and by people without any specific medical conditions. Alkaline product, protect skin and eyes especially. Do not inhale the product. Keep out of reach of children.

## WASTE MANAGEMENT

Pots are made using 100% PCR recycled polypropylene and are 100% recyclable. Please consult your local authority for details on waste and recycling in your area. Help protect the environment; do not pour waste or excess paint down the drain.



Please help to minimise waste and respect the environmental impact of manufacture by correctly estimating the amount of product you will need.

#### SUSTAINABILITY GESTURE

Minimise product waste by carefully estimating the amount you will need. Store any unused product for future use according to the "Storage" guidelines.

#### SAFETY INFORMATION

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

#### TECHNICAL SUPPORT

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

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

The information provided is given in good faith, based on IEdiSA's current knowledge and experience of the product, when correctly stored, handled and applied, in normal situations and according to IEdiSA's recommendations. The Technical Data Sheet serves for information and advice, but is not legally binding. In particular, it does not exempt the user from test and check the suitability of the product for the desired application and purpose. IEdiSA reserves the right to make modifications that improve the product or its application. This edition invalidates previous editions.