Industria Española para el Desarrollo
en Investigación 2100, S.A. (IEdiSA)
Pol. Ind. Poliviso, c/ Carpinteros, 25
41520 El Viso del Alcor, Sevilla - ESPAÑA

Manufacturer Declaration

D. Antonio León Jiménez with ID 44954686Y acting in the name of the society Industria Española para el Desarrollo e Investigación 2100, S.A. with CIF A91854877 declares that *Graphenstone*® products lime-based absorb carbon dioxide (CO_2) during its drying process due to the following stoichiometric reaction:

$$Ca(OH)_2 + CO_2 \rightarrow CaCO_3 + H_2O \rightarrow 1\ mol\ CO_2 = 1\ mol\ Ca(OH)_2$$

Below is described absorption of CO_2 in kilograms for a volume of 15l:

TRADENAME	CO_2 ABSORPTION
Ecosphere Premium	4.9 kg
Ecosphere Premium Eggshell	4.3 kg
Biosphere Premium	5.5 kg
GCS Interior Premium	5.0 kg
GCS Exterior Premium	4.8 kg
AmbientPro+ Premium	5.0 kg
Filler Premium F10/F20	3.9 kg
Stuki Premium	3.1 kg
Kratzputz Premium	2.3 kg
Füllmasse Premium	2.7 kg

Unlike ordinary paints, once painted Graphenstone® onto your wall, absorbs carbon dioxide to partially offset the overall lifetime impact of the paint.

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41520-EL VISO DEL ALCOR (Sevilla)

ANTONIO LEÓN
President & CTO
August 1st, 2017

ANNEX I: CALCULATION OF CO_2 ABSORPTION

Calculation of grams of $Ca(OH)_2$:

$$g\ Ca(OH)_2 = \%\ Ca(OH)_2 \cdot \rho \cdot V$$

where:

g $Ca(OH)_2$: weight of $Ca(OH)_2$ in a specific volume.

% $Ca(OH)_2$: percentage of pure $Ca(OH)_2$ of the product.

ρ: specific weight of $Ca(OH)_2$.

V: packaging volume.

Calculation of CO_2 absorption:

$$1\ mol\ CO_2 = 1\ mol\ Ca(OH)_2 \rightarrow \frac{g\ Ca(OH)_2}{Pm(Ca(OH)_2)} = mol\ Ca(OH)_2 = mol\ CO_2$$

$$mol \cdot Pm(CO_2) = \boldsymbol{g\ CO_2}$$

where:

Pm ($Ca(OH)_2$): molecular weight of $Ca(OH)_2$, 74 g/mol.

Pm (CO_2): molecular weight of CO_2, 44 g/mol.

ANNEX II: QUALITATIVE TEST

The image shows that effectively CO2 is absorbed during the drying of the paint in qualitative way.
Notes: quantitative results are not representative in the absence of a standardized standard.

NOTES: ENVIRONMENTAL CLAIMS

- 3 buckets of 15 litres absorb the same CO_2 than one tree of 250 kg for 1 year of growth.
- CO_2 absorption property of the paint is referred to the use phase of the paint.
- Claim is only based to the CO_2 absorption and no other properties of the tree.