

PHOTOACTIVE & SUPER-HYDROPHOBIC TRANSPARENT NANOPAINT



**SPECTRUM
NANOTECH**
SOLUTIONS FOR A MODERN WORLD

PRODUCT DESCRIPTION:

This product is a state-of-the-art transparent ceramic coating, water based, that dries at ambient temperature, reacts with the light and has anti-pollution properties. Suitable for mortar facades, single skin block concrete and mineral surfaces in general, without the need for primers or fasteners. Only a very thin coating required to provide high efficiency and durability.

PROPERTIES:

- Durability up to **20 years**.
- Easy to apply with roller, brush and eco static spray application.
- Water-based formulation with last generation materials and 100% mineral.
- No need for previous applications such as fasteners or primers.
- Adhesion in mortars, monolayer and surfaces of all kinds with **three-dimensional penetration**.
- **Lotus Effect Properties:** super-hydrophobicity.
- Breathable product that repels dirt, water and moisture.
- **Photoactive Ceramic Coating:** Reacts with direct or indirect light and eliminates unwanted organic matter like viruses and bacteria.



Lotus Effect Properties



- Environmental decontamination, selected by CIEMAT, **Spain's Ministry of the Environment**, INECO, EU LIFE.
- Breaks-down environmental pollutants by decomposing the harmful materials into water, oxygen, nitrates and other inert components.
- Anti-bacterial and anti-virus spectrum: improves air quality by creating a **healthier environment**.
- Excellent **self-cleaning effect** with light and in wet weather giving pristine surface finish.
- **Respects the environment**, because of its quality and material formulation.

APPLICATION FIELDS:

- Exterior and Interior coating.
- Ideal for highly polluted areas, such as metropolitan cities, as it will improve air quality.
- Excellent for applications in schools, airports, gyms, shopping malls, hotels, restaurants, hospitals, and general construction or public areas in general.
- Applicable on paintings of conventional acrylic facades properly sanitized.

APPLICATION:

In case of poor conditions surfaces, it is recommended to first improve all affected areas by removing all materials that is not attached to make the sanitation process easier.

Clean any dirt and dust you may have with water and neutral pH detergents, as needed. The surfaces need to be clean and dry, without the need for fasteners.

Apply with the use of paint rollers, brushes or eco static gun spray, starting from the bottom up to

prevent pre-impregnation of the product on the surface.

By starting from the top, the coating will run down the surface and there could be an uneven impregnation, which will make it difficult to create an even surface.

The ideal temperature range for the application is 5 to 27°C, in a dry environment.

If you need to re-apply, let the surface dry for a day.

DRYING:

Please note that environmental conditions always influence the drying of paints.

Touch-Dry: 15 / 30 Min (23°C)

Full Dry: 15 days (25°C)

STORAGE:

Minimum 1 year in original container, closed in dry conditions of ambient temperature.

After this period, rigorous agitation or filtering is required.

Always store in plastic containers.

Maintain in temperatures between **5 and 35° C.**

DELIVERY FORM:

Single units in **20kg or 25Kg** - plastic barrels.

COLOUR:












Transparent / Invisible

ASPECT:

Creamy Liquid.



TECHNICAL INFORMATION:

-  **Binding type:** Solar water-based gel
-  **pH:** 3-4.
-  **Particle size:** 2nm.
-  **Crystal structure:** Three-dimensional Crystalline ceramic
-  **Agglomeration index:** 2-4.
-  **Density:** 1.00751.01 g/cm³.
-  **Active material content:** 100%
-  **Performance:**
 - On porous surfaces: 1kg/20m² to 30m².
 - Non-Porous surfaces : 1kg/50m² to 100m²
-  **Anti-pollution test:** Tested by CIEMAT ISO 22197-1
-  **Long-life product:** Resistance to weathering and aging.
-  **Antimicrobial Solution:** The surface is coated against bacteria and viruses.

FINISHES



Transparent / Invisible Finish



DOES NOT CONTAIN
HARMFUL MATERIALS





RESPECT THE
ENVIRONMENT



DOES NOT CONTAIN
SOLVENTS

SELECTED BY CIEMAT AS THE BEST REACTIVE SOLUTION
FOR ENVIRONMENTAL DECONTAMINATION

COMPARISON OF THE EMISSION OF INTERIOR NANO PAINTS AND THE LIMITS DEFINED IN CATEGORY A + VOC		
Formaldehyde	< 0	< 10
Acetaldehyde	< 0	< 200
Toluene	< 0	< 300
Trichlorethylene	< 0	< 250
Ethylbenzene	< 0	< 750
Xylene	< 0	< 200
Styrene	< 0	< 250
2-Butoxyethanol	< 0	< 1000
1, 2, 4-Trimethylbenzene	< 0	< 1000

HEAVY METAL CONTENT OF INTERIOR NANO PAINTS	
Lead	< 0.00%
Hexavalent Chromium	< 0.00%
Mercury	< 0.00%
Arsenic	< 0.00%
Barium	< 0.00%
Selenium	< 0.00%
Antimony	< 0.00%

CERTIFICATIONS:

ISO 22197-1: Photoactive Re-activity, NOx elimination.

ISO 24448: Photoactive Re-activity

Cleanability: MIL-PRF-87285

AMS 3095A: INTA (National Aerospace Technical Institute)

ISO 1513: Coating preparation of samples for test.

ISO 2813: Brightness Analysis and Testing

ISO 7724-3: Difference of colour.

ISO 2409: Lattice Cutting Adhesion

ISO 6272-1: Impact.

ISO 6860/1519: Flexibility Test

ISO 2812-2: Resistance to the water immersion (14 days) with final evaluation, adhesion and resistance.

ISO 2812-1: Resistance to the hydraulic fluids (30 days), with final evaluation of blistering, resistance defects.

ISO 3665: Filiform corrosion resistance (1000 h)

ISO 7253: Saline Resistance (3000 h)

ISO 11507: Resistance to accelerated aging, UV/condensation (1000 h), with evaluation of loss of brightness and variation of colour.

AMS3095A 3.2.2.13: Heat Stability (100 h, to 150°C) and flexibility evaluation.



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**ENVIRONMENTAL DECONTAMINATION SOLUTION,
TESTED AND SELECTED BY CIEMAT, SPANISH
MINISTRY OF THE ENVIRONMENT, E.U. LIFE & MINOX.**

**SELECTED AS THE BEST CATALYTIC
EFFECT ON THE MARKET IN 2018.**

Ciemat



**ECO - FRIENDLY
0-COV
ALTA CALIDAD**



**GOBIERNO
DE ESPAÑA**

**MINISTERIO
DE AGRICULTURA Y PESCA,
ALIMENTACIÓN Y MEDIO AMBIENTE**

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