Clean and healthy air

Odor removal

Bacteria and molds inhibition

Self cleaning surfaces

# **activa**® The intelligent coating

### Eco-Active Photocatalytic System

Photocatalysis: A revolution for your health and the environment

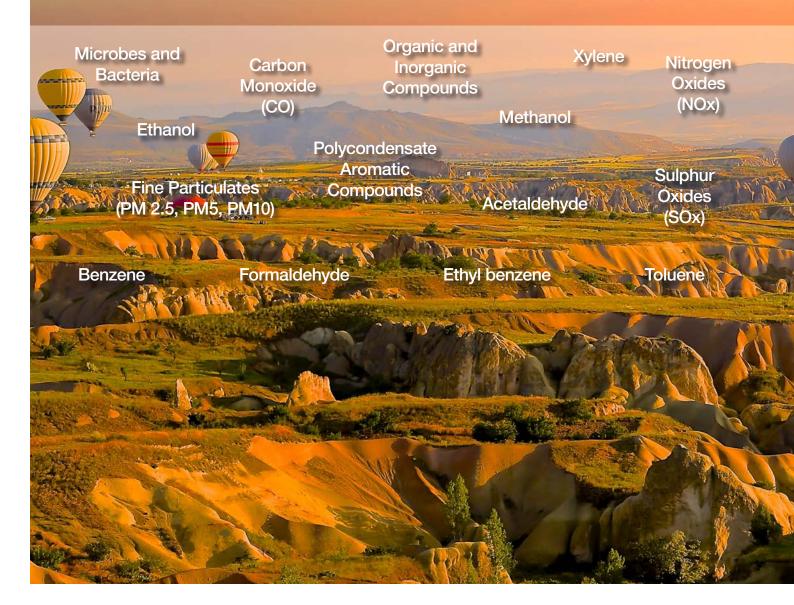
### **Photocatalysis**

### What is it?

Photocatalysis is a natural process where a substance is excited by light energy (natural or artificial light) and uses this energy to destroy pollutants and harmful compounds.

Once active, all surfaces will use the received light the same way as a solar cell (photovoltaic panel) does, and will eliminate through a red-ox process any organic or inorganic substances, dirt and pollutants that come into contact with the photocatalytic surface.

Photocatalysis is effective against many harmful chemicals, including:



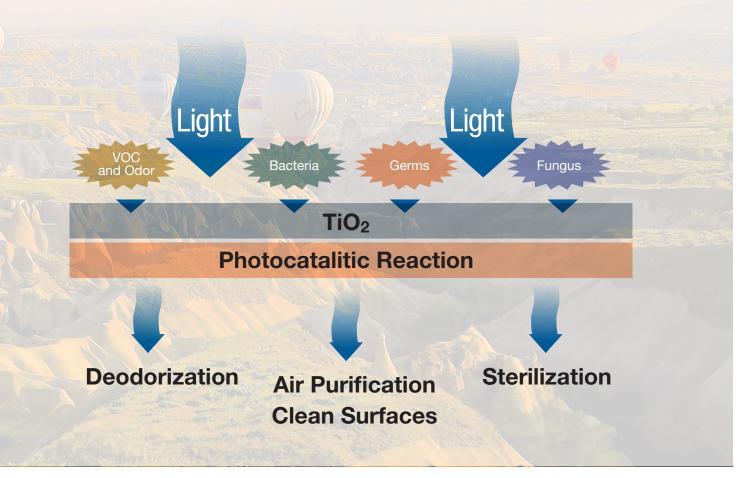
### How does it work?

The photocatalytic process transforms these pollutant and harmful compounds (see image) into gypsum (CaSO<sub>4</sub>), calcium nitrate (Ca(NO<sub>3</sub>)<sub>2</sub>) and limestone (CaCO<sub>3</sub>), which are completely safe for your health and the environment. Through this process, our products, either in indoor or outdoor applications, have the following

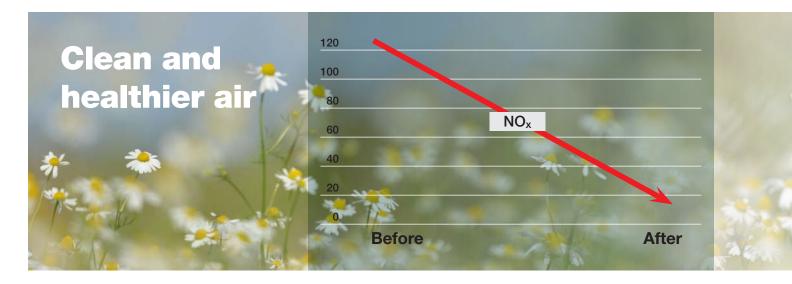
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#### **PERMANENT FEATURES:**

Elimination of airborne toxic pollutants produced by cars, factories, varnishes, glues, heating, kitchens and so. Inhibition of microorganisms (bacteria, fungi, molds...) growth, by destroying the substances that feed them. Destruction of dirt from the surfaces, maintaining cleanliness, and saving maintenance costs. Elimination of odors, also produced by organic substances in the air that are permanently deleted. Works perfectly at any temperature.

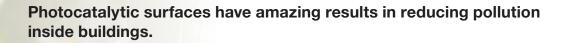


# Advantatges of the photocatalytic ecoactive system









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In our homes and offices, besides the contaminants caused by automobiles and industries abroad, , we must include contaminants that are produced in the same building, either because of the building materials (glues, varnishes, solvents...), or by our normal activity (combustion fumes and cooking, heating, maintenance,...).

Also, photocatalytic surfaces on the outside walls act as a shield to prevent dirty air compounds from entering.

### The main cause of dirt on the walls of our homes, both inside and outside, is the gradual accumulation of the particles and pollutants, the same ones that we are continuously breathing in.

Within a short time, a painted room presents shadows in the corners and edges of windows, doors and frames of decorative elements. These are areas where the air moves slower and where the dirt begins to accumulate. The same is true on the radiators or air vents, by the opposite reason: in that area air is continuously circulating, and so are the pollutants.

The problems are both aesthetic and hygienic, meaning high maintenance costs, recoating and cleaning, and health risks. Pollutants are nutrients for bacteria and fungi.

#### Photocatalytic surfaces prevent the growth of microorganisms, as they do not allow the accumulation of substances that feed.

Therefore they are very effective against attacks from bacteria, fungi, molds and microorganisms in general.

The results of such action are backed by numerous measurements made on sensitive walls (schools, hospitals and food factories), and the results obtained in specialized laboratories.

# Advantages of the photocatalytic ecoactive system

#### Healthy and Odorless Housing

#### Traditional deodorant systems consist of perfume dispersed into the air, blocking the odor perception in our nostrils.

However, with it we continue breathing in the pollutants, even without noticing their smell.

Photocatalytic surfaces do not emit any odor, but destroy harmful compounds that produce them. In our case, the absence of odor indicated the purity and cleanliness of the air entering into our lungs.

#### Healthy Families

It is well known that people who live in urban environments suffer more respiratory problems, and even their life expectancy is lower than that of people living in areas with clean air.

Photocatalytic walls in homes perform the purification process the same way as forests and grasslands. Even using the same energy source, Light.

Ecoactive products represent a step forward in technology and environmental health:

- Our products are not only **environmental friendly**, but also actively clean contaminated environments.
- In addition to the environment amelioration, the greatest **ben**efits are for families' health in their own home.
- It is a technology that saves money, *photocatalytic surfaces are kept clean* by the effect of the dirt destruction.
- The effect is **PERMANENT**





An extreme test: Urban tunnel in Milan. (Via Porpora) State of the Photocatalytic wall (left) and untreated area (right), after a month of traffic.







## Our photocatalytic products

Our products improve the environment actively. All our products are waterborne, and their fabulous features allow us to have an innovative role in the field of green architecture, as these products not only protect, but they improve the environment actively.

Our product range includes many types of coatings, tailored to the needs of families, communities and professionals, applicable on any surface either interior or exterior, and with a wide colour range, to allow access to our technology to as many users as possible.

Your application and its features make our products easy to apply solution with a degree of elasticity and optimal breathability but with the added value of the photocatalytic properties of antipollution, self-cleaning and antibacterial.

We also have a range of primers to ensure perfect adhesion to any type of surface. Ecoactive coatings are ready for use. They can be applied by roller, brush or spray.











• Building facades, balconies, galleries, indoor and outdoor walls

• Concrete

• Subways, tunnels, garages... (1)

• Indoor areas, such as kitchens, bathrooms, offices, stairs, restaurants, hospitals, gyms... (1)

(1) Sufficient Quality and Quantity of light must be checked to assure results









# Product range in our photocatalytic system



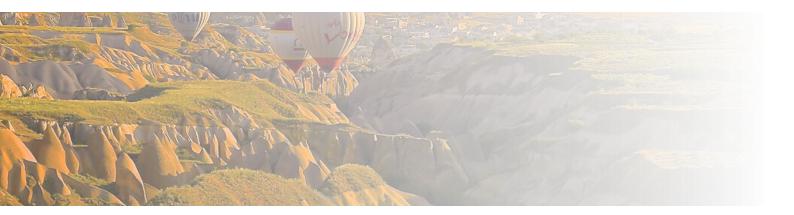
Our System allows the use of our products in the majority of the surfaces in houses, public buildings, industries, monuments and structures. Please read our TDS and HSDS.

All kind of pastel colours can be produced on request.









- Indoor Waterborne coatings (PhotoDeco, PhotoWall, PhotoLacq) (\*)
- Outdoor Waterborne coatings (PhotoSiloxane, PhotoSilicate) (\*)
- Treatments for concrete, natural stone and bricks (PhotoActiva)
- Treatment for Glass (Cristal Clean)
- Products for asphalt roads and pavements (PhotoCryl Asphalt)
- Products for sidewalks and structures (PhotoActiva)
- Tunnels Coatings (PhotoTunnel)
- Concrete protection coatings (Photo Siloxane)
- Photocatalytic Stucco (\*).
- Photocatalytic Pavements
- Photocatalytic Quartz for concrete pavements
- A range of Photocatalytic solutions for OEM and end users needs

Public Works, Flooring, Grouts, Facade finishes and cement based coating, are also available in our photocatalytic range. (\*) A wide colour range is available, on request

Other Cement based solutions are also available, on request.



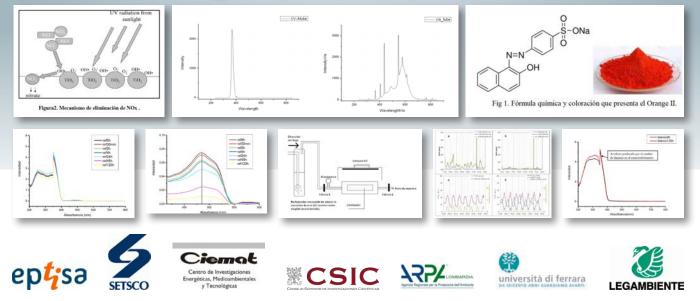


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### **Eco-Active Photocatalytic System**







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