



AIR CLEANED
BY YOUR WALLS
THANKS TO
FOTOSAN.

www.fotosan.it

what is FOTOSAN ?



FOTOSAN is a transparent varnish that improves air quality and sanitizes the environment. It is a transparent solution that uses light to purify the air through the walls, eliminating the action of pollutants and pathogens. **FOTOSAN** contains the latest generation of nanometric titanium dioxide.

WHAT IS FOTOSAN FOR ?

Promotes the decomposition of chemical and biological agents that pollute our homes and environments where we stay: offices, schools, gyms, medical offices, shopping centers and many others. Returning cleaner air to breathe in complete safety.

HOW DOES FOTOSAN WORK ?

Thanks to both natural and artificial light, **FOTOSAN** develops a high oxidising effect against organic and inorganic substances with which it comes into contact (photocatalytic effect), cleaning up the air from the presence of harmful substances.

HOW TO APPLY FOTOSAN?

With a special low pressure pump the transparent product is atomized.

It is evenly distributed on the surfaces to be treated without dirtying and without damaging the surfaces.

WHERE TO APPLY FOTOSAN?

FOTOSAN is transparent and can be applied to:

- › PAINTED WALLS AND CEILINGS WITH ANY FINISH AND COLOR
- › FIBER LOWERINGS
- › MOVABLE WALLS
- › NATURAL CONCRETE, BRICKS OR STONES
- › WOODEN SURFACES

photocatalysis

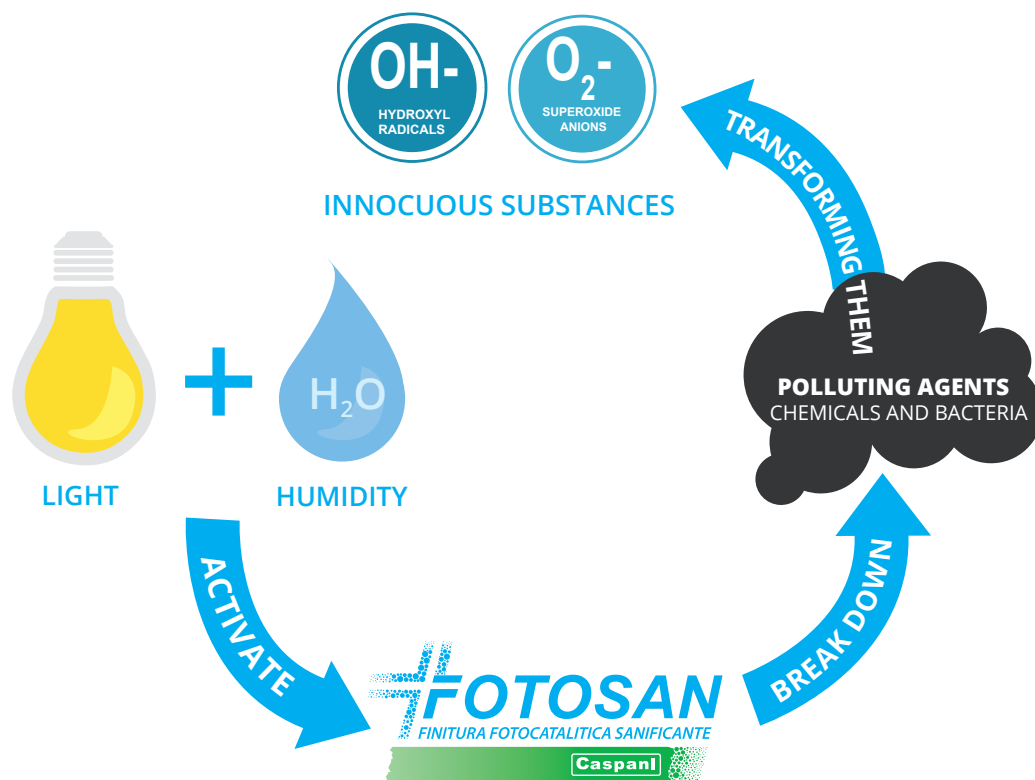
Photocatalysis is a **natural phenomenon** involving a substance, referred to as a photocatalyst, which changes the speed of a chemical reaction through the action of light (natural or produced by bulbs).

In the presence of air and light, a strong **oxidising process** is activated, leading to the decomposition of organic and inorganic polluting substances which come into contact with such surfaces. Process functioning **imitates photosynthesis (transforming substances harmful to people into inert substances)**.

Upon coming into contact with any coated surface, two elements - light and air - favour the activation of reaction and consequent decomposition of organic substances, microbes, nitrogen oxides, Polycyclic aromatic hydrocarbons, benzene, sulphur dioxide, carbon monoxide, formaldehyde, methanol, ethanol, ethylbenzene, nitrogen monoxide and dioxide.

Polluting and toxic substances are transformed into:

- Sodium nitrate (NaNO_3),
- Sodium carbonates (Na_2CO_3)
- Calcium carbonate (CaCO_3)



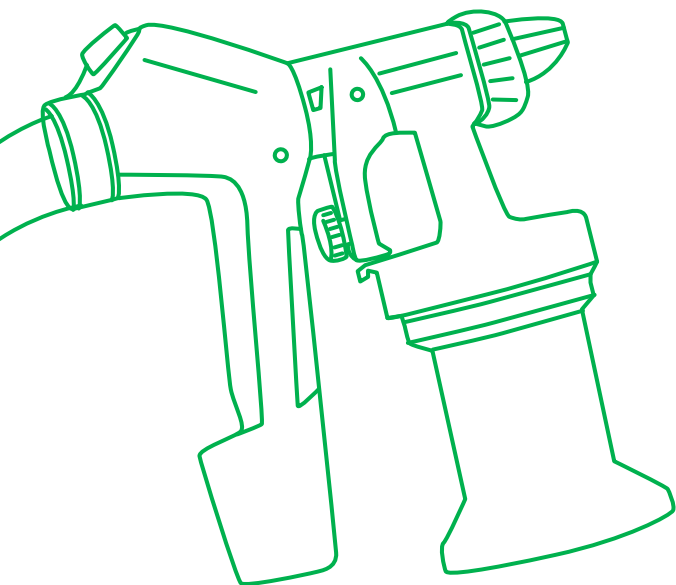
How does Photoactive **TiO₂** **FOTOSAN** work?

Upon exposure to UVA radiation, anatase titanium dioxide absorbs and converts the UVA part of light energy into electrons and electron holes. TiO_2 reacts with water (humidity in air) to create hydroxyl radicals (expressed as OH) and oxygen, to create superoxide anions (O_2^-).

Billions of these highly oxidising substances are created in one billionth of a second, working to break down organic material at a molecular level.

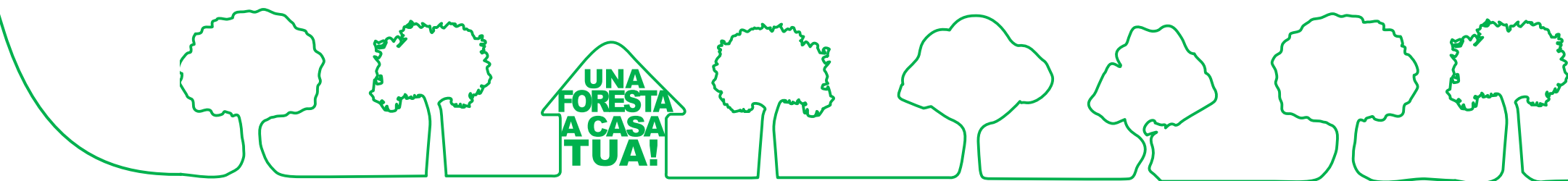
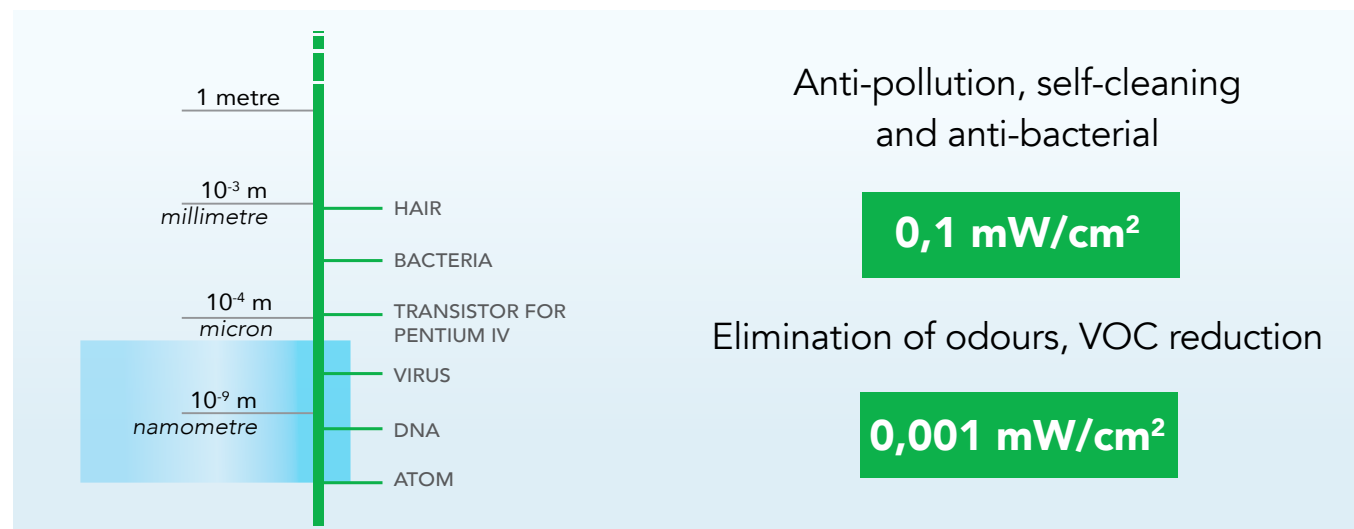
Photocatalysts do not lose their property over time because they only serve to activate the process, they do not bond with polluting agents and remain available for new photocatalysis cycles.

Nanotechnology in a water based solution of nanometric silver and photocatalyst, state-of-the-art titanium dioxide.



- Stronger – Works with less light
- Maximum adhesion
- Long-lasting

- Safe, easy to apply
- Totally transparent
- Anti-bacterial and anti-microbial





Real and immediate advantages:

- Anti-pollution
- Self-cleaning
- Antibacterial

These properties simply derive from **the oxidation of substances** which come **into contact** with a **photocatalytic surface**.

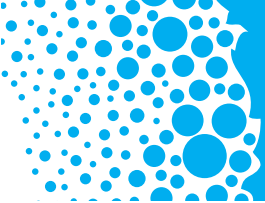
- If said substances are **pollutants** (nitrogen dioxide, sulphur dioxide, carbon monoxide, fine particles) then we speak of **anti-pollution reaction**;
- If said substances are **staining substance** (soot, colourants) we speak of **self-cleaning reaction**;
- If they are **bacteria, moulds, fungi and micro-organisms**, we speak of **antibacterial reaction**.

benefits of Fotosan



FOTOSAN transforms any surface into a **self-cleaning and eco-sustainable** material which pro-actively eliminates the build up of dirt and biofilms, improves air quality and eliminates organic odours. Formulated with the most advanced photocatalytic oxidation technology available today, in an advanced water-based solution, **FOTOSAN** uses light, not chemical products, to benefit the environment.

- Actively reduces smog levels if applied onto outdoor surfaces such as cement and building façades
- Eliminates unpleasant odours
- Formation of a super-hydrophilic surface which enables the easy elimination of dirt.
- Applicable to all surfaces, including: cement, stone, ceramic tiles, painted walls, plastic and metal
- Maximum effectiveness
- Long-lasting



benefits of Fotosan

NOx

(nitrogen oxides present in atmospheric pollution)

- 80% in just 2 hours

10 m² = 3 medium-sized trees
1 m² purifies 50 m³ of air per hour



distributed by



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