

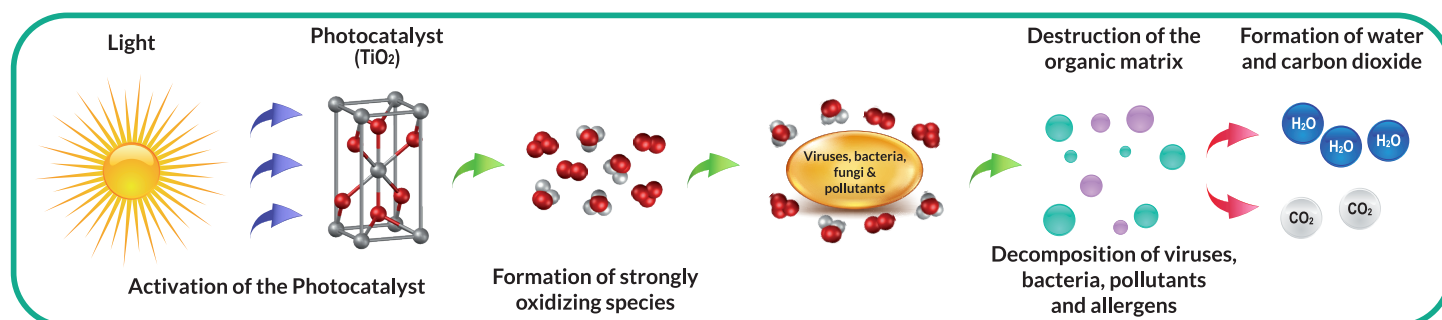
TITANIUM DIOXIDE

MPS has always been attentive to **social responsibility** for a more **sustainable** future. Precisely for this reason, it dedicates particular attention to the **eco-sustainability of its products**, carefully following every stage of the production process, starting from the **exclusive use of premium materials**, such as our new **Titanium Dioxide** polymer.

This material features **anti-pollution** and **antibacterial** properties, is **odorless**, and also offers high **resistance to impacts, atmospheric agents, and chemical agents** such as **smog, acids, saltiness, ozone**, and **UV rays**. It is also certified **Indoor Air Comfort Gold**, guaranteeing very low emissions of **Volatile Organic Compounds (VOCs)** and **indoor air quality**.

This polymer complies with various **certifications**, including those regarding **antibacterial certification** and **CE fire resistance**, satisfying the most rigorous **European standards**, as it has been subjected to a series of tests to **verify its capacity and safety**, performed by **specialized bodies**.

Every **MPS** product that benefits from this treatment has the ability to be cleaned with any cleaning product, including ethanol-based ones.



Its main characteristic is the **photocatalytic activity**, activated by **solar light** or **artificial light sources**: when the **Titanium Dioxide nanoparticles** are exposed to **UV rays** or **direct light**, a process is activated that generates **highly reactive oxidizing species**, capable of **degrading organic and inorganic substances** present in the air and on surfaces, thus contributing to the **continuous purification** of the surrounding environment.

Furthermore, photocatalysis contributes to the **degradation of bacterial endotoxins**, ensuring a more complete and long-lasting **antibacterial and virucidal effect**.

It has been verified that **Titanium Dioxide** is **more effective than any other antibacterial agent**, since the **continuous** photocatalytic action also occurs in the presence of cells covering the surface and during the active multiplication phase of bacteria.

In general terms, **disinfection** using **Titanium Dioxide** is **3 times more effective** than that obtained with chlorine and **1.5 times more effective** than that obtained with ozone.