

WoodTonic® Photocatalyst Solution

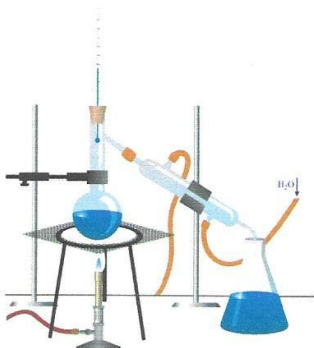


Principle Mechanism

Photocatalysis is the acceleration of a photoreaction in the presence of photocatalyst. During this photoreaction, light is absorbed by an adsorbed substrate. The process (Photocatalytic Activity, PCA) creates electron-hole pairs, which generate free radicals (e.g. hydroxyl radicals: $\bullet\text{OH}$) able to undergo secondary reactions.

Secondary Reaction

Photocatalytic oxidation of VOCs is a cost-effective technology for removal of VOCs, micro-organism, and **viruses**, i.e. formaldehyde, ethylene, organic solvent vapor, pathogen, mildew, even flea.



Preparation (CIPO Patent Filing# 2985252) involves:

- N-doped nano metal oxide
- prevention of nano particle from coagulating
- prevent ionization of metal oxide in solution
- EU REACH Compliance
- RoHS Compliance

Application Methods



- Direct Spraying
- via Air Ventilation

On top of the above-mentioned methods, WOODTONIC can also be coated on substrates, i.e. sieve, net, wood surface, leather, metal surface, plastic surface, etc...

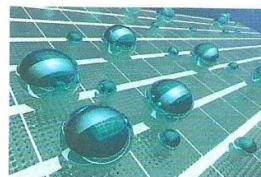
Functions



Virucidal,
Bactericidal



Removal of
formaldehyde,
VOCs



Self-cleaning



Non-Toxic



Long Lasting



Anti-Mildew

WoodTonic® Air Detoxifier Device

“Virus & Bacteria Killer”

Canadian Patent Filing Inventions

(LED Activated N-Doped Nano ZnO)

1. CIPO# 2,985,252
2. CIPO# 3,007,854
3. CIPO# 3,073,037

This Technology Doesn't Require the following:

- Activated Charcoal
- Anion Generation
- Nano-Silver
- Nano-Titanium Dioxide
- Ozone Generation
- UV Irradiation
- Oxygen-Rich Compounds



American Chemical Society, “ACS Nano 14/6/2020, 6383-6406”
N-Doped Nano ZnO can inactivate **SARS-CoV-2** !

“Environmental Science & Technology, *Photocatalysis Could Be Used to Inactivate Coronaviruses*”

Functions (instant eliminate any VOCs & Airborne Organism)

- Viruses, Bacteria
- Formaldehyde
- LPG (Methane/Ethane/Propane/Butane)
- Carbon Monoxide
- Organic Amine, Ammonia Gas
- Volatile Chlorofluoro Carbons
- Organic Volatile Carbons
- Small Water Cluster formation



We are the HKSTP Graduated (2015-18) Incu-Tech Company