

Algae, Fungi & Moulds are undesirable and hard to control

What is Mould?

Mould is formed by microscopic creatures belonging to the Fungi Kingdom. When tiny airborne spores of Mould burst, and then land on a favourable surface, they proliferate into visible colonies, and find other favourable surfaces on which to further develop.

Fungal growth requires oxygen, adequate temperature, nutrients and humidity as noted below.

Temperature tolerance:

Thermophiles - 35°C + human pathogens such as Aspergillus

Fumigatus

Mesophiles – 18°C to 35°C

Psychrophiles – some fungi grow at 4°C or below.

Nutrients:

Dust, Fabrics, Paper, Wallboard, Wallpaper, Sugars (fruits, vegetables), Wood etc.

When will I know if I have growth problems?

Areas that accumulate humidity such as bathrooms, kitchens or air conditioning units will usually have problems with Mould because fungi develop in high humidity environments ...

- If you see whitish, greenish, bluish, or even dark spots on your walls or ceiling these may be Mould problems.
- Buildings with poor sun exposure, as the sun is a natural germicide and helps to prevent excessive humidity.
- High risk buildings :
 - Near forests, due to high concentration of Mould colonies
 - Near the sea or a river as the high humidity level raises the development of new colonies.
 - Rooms with water leakage or infiltrations may have Mould infection.(if the infection is in cupboards, check for possible leakages from water pipes nearby).

Are there any health implications?

Yes. In addition to it being an unpleasant odour and sight, Mould is an cause of harmful effects to human health that can turn to allergic and toxic reactions.

Possible Allergenic effects

The most common are;

- Allergic reactions – Rhinitis and Asthma
- Asthmatic attacks
- Difficulty breathing
- Itching and skin stains
- Mucous membrane irritation
- Nasal congestions and irritation
- Sneezing and coughing
- Throat and eye irritation

Infectious effects

Immune suppressed patients are more likely to develop infections. Included in such groups we can highlight the danger to patients such as:

- Burn victims
- Elderly
- HIV positive
- Newborns
- Organ transplant patients
- Other immune-suppressed patients
- Undergoing chemotherapy or radiotherapy

Toxic effects

Mould toxins studies suggest that toxins may be the cause of:

- Neurotoxin effects such as fatigue, headaches, memory loss, depression, erratic moods, convulsions and shaking
- Potential cancer trigger
- Pulmonary hemorrhage;
- Reactions in the immunological system (reducing the ability of the organism to react to diseases)

Prevention Measures

- Prevent leaks due to rain; or when unavoidable, dry and treat water damage within 24 hours;
- Reduce humidity in your home by opening windows for approximately 30 minutes daily;
- Regularly clean places that accumulate humidity such as showers, sinks, taps, pipes and the floor areas around such fixtures;
- Limit carpets and plants use in your home;

Cleaning your home

Use a cloth or a sponge with one solution containing: 1 cup of chlorine diluted in 1 quart of water. Scrub surfaces with this solution, then clean again with water and detergent. Allow to dry. (WARNING: Never mix chlorine with ammonia products, as the result is extremely toxic.).

- Whenever possible, leave objects exposed to sunlight after cleaning. It is very important that objects are dried after cleaning otherwise they will be subject to new Mould contamination.
- Porous materials such as wood, fabric, cushions, and mattresses retain water and are likely to be contaminated, making it difficult to clean them. In the event that these objects are contaminated, it is advised to dispose of them.
- Use great care: always use gloves, mask, and apron and maintain high air circulation during the cleaning process.

Indoor air pollution affects all our health.

It is known that the presence of Fungal spores can cause aggravate respiratory problems at home or at work.

Airborne spores are the seeds for new Mould infection for building infestation.

The key to controlling infections or infestations is to destroy airborne spores by the elimination of existing colonies.

Consequently, we recommend the use of our ***Airborne TiO₂ PCO*** and Allergy free lamps as high efficiency air sterilisers together with the preventions measures previously suggested.

TiO₂ PCO drastically reduces high contamination levels.

Treating the air you breathe, is a matter for Health - not choice!

We live in an era that is sometimes hailed as the "century of the environment." We can no longer assume that social challenges such as environmental pollution, dwindling natural resources and climate change can be set aside for future generations.

Ongoing research has shown that levels of oxygen in the air have decreased over the decades from >37% to below 21% today. And with this rapid decrease of quality, many air quality related concerns have resulted in the majority of today's diseases.

We can live without food for approximately 3 weeks, 3 days without water but only about 3 minutes without air. Yet many today are totally unaware that our healthy clean air of yesterday is depleting very rapidly today.

CO₂ in the air won't kill you.

IAQ, Moulds, Volatile Organic Compounds, NOx and SOx can!

The Technology of Photocatalyst Oxidation

TiO₂ Photocatalytic Oxidation (PCO) Is a revolutionary breakthrough in the exciting field of material science that holds the power to create more healthy and environment friendly spaces for people, plants, property and animals alike. It's also an active Positive Protection plus Persistent Prevention application that will constantly assist in maintaining both a Healthy & Safe environments - Indoor or Out - 24/7 - 365

Our PCO application is *not* "just another run of the mill cleaning or disinfection product" - it is a specialist amorphous mineral which can be applied in situ to any surface, fabric or textile and by utilising the power of light and ambient humidity - is an always active protection and persistent guard, designed to *keep* surfaces clean and sterile. Easily applied or installed - with little or no disruption to your normal routine - your Interior surfaces can be protected from airborne Bacterial /Viral pollutants and Environmental contaminants - 24/7-365 for years to come.

PCO treatments have been clinically proven to completely destroy bacteria, virus & disease such as - *Anthrax, Avian Flu H5N8, Black Mould, Candida, C. Difficile, E. Coli, H1n1, Legionnaires, Listeria, Mould & Fungi, MRSA (staph), Ms-2, Mycobacterium fortituum, NDM-1, NvN1, SARS, Strep, Salmonella, vancomycin resistant enterococcus (VRE)* etc and can be utilised extensively in the many fields of Commerce / Industry, Education, Health / Care / Disaster Intervention / Travel, / Transport and Water supply and storage facilities etc !

Because of the 2-3nm sized particles - which contribute to its increased active surface area, our TiO₂ has achieved a revolutionary breakthrough - by being many times more sensitive and effective in lower light areas - making it much more potent in doing what it does "naturally".

Environmental contaminations, which are currently growing on a daily basis around the world, are a serious social problem. Examples of such contamination are endless, however, a small sample of uses are as follows; Hospital Acquired Infections (HAI) - Bacterial and Viral infections contracted during medical procedures or even during hospital occupancy. *Water Pollution* - caused by Agriculture, Industrial & household wastes etc, *Air Contamination* - outdoor and indoor air pollutants such as NO_x, SO_x and Room Air contamination caused by Mould/Fungi and Volatile Organic Compounds (VOC's)...one of the main cause of allergies.

The fact is that that using existing processes to eliminate the above environmental contaminations will possibly increases the amounts of harmful greenhouse gasses, however, this situation has lead us to a dilemma on how not to use up pollution related energy to achieve the anti-pollution goal - the 21st century proposal to the solution is PhotoCatalytic Oxidation (PCO) - No harsh chemicals or large amounts of energy being used, just a naturally occurring process using the power of Light and normal ambient humidity.

We are the Main Distribution and Application specialists in the UK and Ireland and main agent for the EU and Scandinavia using nanoYo™ TiO₂(PCO) Interior/Exterior "Non Mechanical" Self-cleaning Surface Technology ...that is activated by light!



nanoYo™



If you have any questions or would like us to apply

OUR SOLUTION To YOUR PROBLEM

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Information on FUNGI... ALGAE & MOULD Growth.



For Your

HEALTH

and a cleaner

Environment

