FAQ

HOW IS CLEAN AIR APPLIED?

The Clean Air solution is administered through spray application, either during a manufacturing process or as a retrospective measure. Before application, it is essential to thoroughly clean existing surfaces.

WHAT IS TITANIUM DIOXIDE (TI02)?

Titanium dioxide is the principal ingredient of Clean Air and is found in many everyday products such as sunscreen, toothpaste, cosmetics and even in some food items as a white coloring. It's used because of its proven cleaning properties.

HOW DOES CLEAN AIR STAY ON A SURFACE?

The Clean Air product benefits from a unique formula that binds and adheres the 'cleaner' ,titanium dioxide, to a target surface keeping the coating in place and performing over an extended period. This binding ability has been tested against the ISO 22197-1 (2016) standard having undergone months of analysis at the International Photocatalytic Standards Testing Centre at Queens University, Belfast.

AND HOW DOES THE SCIENCE ACTUALLY WORK?

Think of the photocatalytic process as a super cleaning power triggered by light. When light hits the core ingredient of Clean Air, titanium dioxide, it grabs water and oxygen from the air and splits them into tiny particles. These particles then break down the harmful green house gasses in the air, like nitrogen compounds (NOx) and odors through a chemical reaction that ultimately dissolves them.

ARE THERE ANY TOXICITY ISSUES RELATED TO THE PRODUCT?

Clean Air does not pose toxicity issues. Titanium dioxide (Tio2) has been banned by the EU in food products due to concerns about its toxicity, particularly in its raw state. However, within Clean Air there is no carcinogenic risk associated with it.

WHAT IS THE POLLUTANT REMOVAL RATE?

The ISO 22197-1 test results show that the net NOX reduction is 222.03 mg/m2/day. We're also working on similar rate testing for SO2 and VOC's which we hope to be able to publish soon.

WHAT IS THE OUTCOME OF CLEAN AIR ON NOX POLLUTANTS?

NOx is turned into nitrogen gas (N2), oxygen gas (O2), and nitrates . The resulting matter is harmless and dispersed by weather conditions such as wind , rain or snow.

WHAT IS THE OUTCOME OF CLEAN AIR ON SO2 POLLUTANTS?

SO2 is transformed into sulfate ions (SO_4^{2-}). The resulting matter is harmless and dispersed by weather conditions such as wind , rain or snow.

WHAT IS THE OUTCOME OF CLEAN AIR ON VOC POLLUTANTS?

The conversion of VOCs (Volatile Organic Compounds) into water and carbon dioxide results in a negligible increase in CO2 levels—less than 0.00001%—which is vastly overshadowed by a significant reduction in harmful NOx pollutants. Despite the slight addition of CO2, the net environmental impact is positive due to the substantial decrease in both VOCs and NOx emissions. The diminution of NOx is crucial, as it mitigates environmental harm far more than the minimal greenhouse gas effects of the added CO2.

DOES THE WEATHER OR CLEANERS IMPACT THE COATING?

Clean Air has successfully met the stringent requirements of ISO 22197-1 (2016) testing. This certification verifies that the product has undergone comprehensive testing to evaluate its performance under various conditions such as weathering, abrasion, corrosion, temperature and impact of chemicals.

CAN TREATED SURFACES BE RECYCLED?

Yes! Non-fixed or permanent surfaces such as signage or outdoor media can be disposed of or recycled through normal established waste streams as the harmless waste matter is not absorbed into the surface.

WHAT ARE THE APPLICATIONS FOR CLEAN AIR?

The Clean Air product has a versatile range of applications. It can be applied to various surfaces like printed signage, billboards, hoardings, LCD screens, glass panels, fencing, buildings, and factories. The remarkable thing is that only a single application to achieve a 6-12 month performance.

DOES CLEAN AIR NEED TO BE RE-APPLIED?

Yes - where applied, the Clean Air coating remains active for a 12 month period, after which re-application is required to maintain the performance of the coated surface. Surface cleaning and re-application by approved contractors is recommended .