



FEYNMAN
LABS



**Cleaner
aircon with low
maintenance.**

VENTIARA

www.feynmanlabs.sg



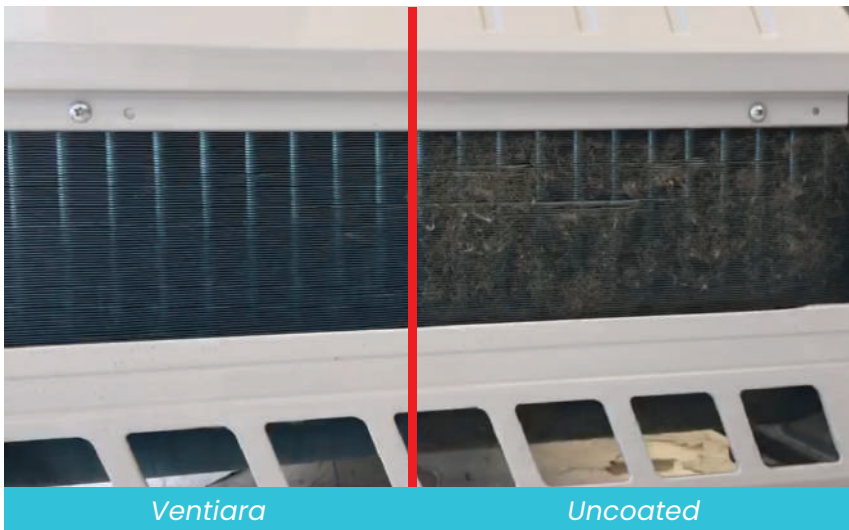
Ventiara improves air quality and protects your aircon units for a healthier space with lesser maintenance.

Ventiara is a coating designed to protect both your aircon units and your air quality. Applied to indoor units and outdoor compressors, Ventiara reduces dust build-up, protecting the internal system and extending the aircon's lifespan. By minimizing dust build-up in the filters and constant sterilizing, it ensures the air you breathe is cleaner, while also cutting down on maintenance needs, saving you time and money.

ANTI-STATIC

Ventiara keeps the surface resistivity within the ideal static dissipative range, so that dust and other pollutants do not attach easily. This means fewer blockages, improved airflow, and better overall efficiency. That translates to less frequent maintenance, lower energy bills, and longer-lasting aircon units—all while ensuring cleaner, healthier air circulating through your space.

Dust does not form on indoor and outdoor aircon units



We have coated part of an outdoor aircon compressor with Ventiara and let it undergo natural weathering. After 4 months, this is the result of Ventiara against the uncoated.

Dust will accumulate due to static electricity. Insulative surfaces are not anti-static, so they allow static to build up, causing dust and dirt particles to adhere due to the charge.

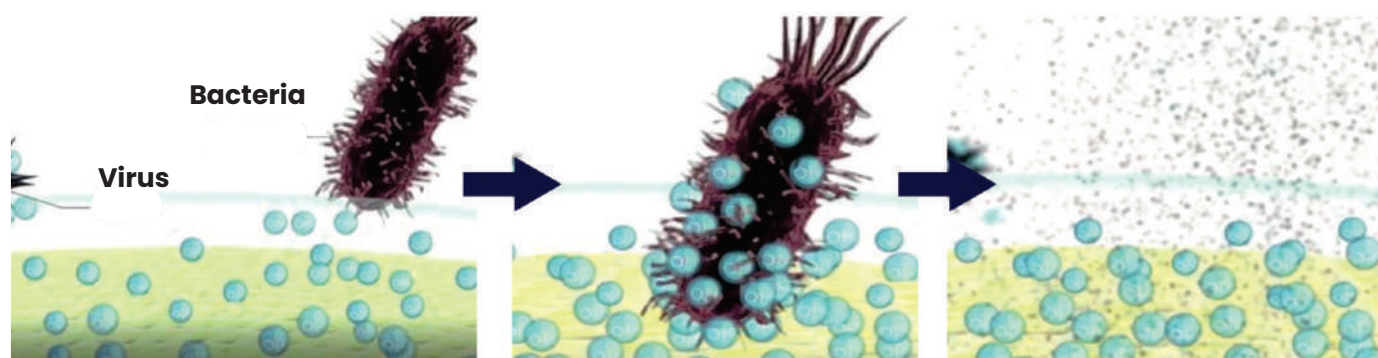


STERILIZING

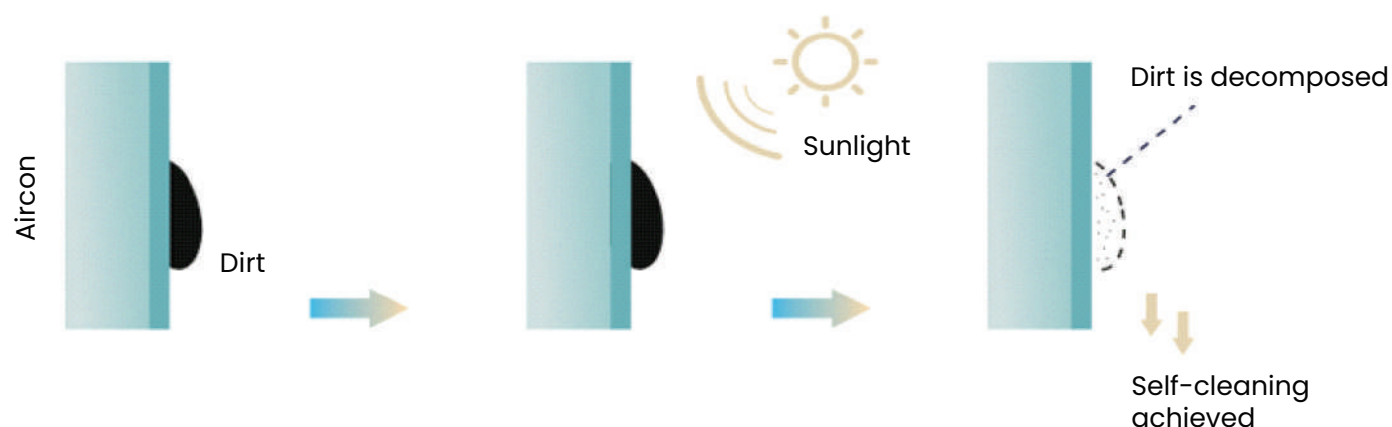
Ventiara utilizes nano-titanium dioxide and nano-silver to become a photocatalyst as well as a cold catalyst. Not only the coating harnesses natural sunlight to eliminate harmful bacteria and viruses for cleaner and fresher air, it is also able to function in low light conditions.

The nano particles catalyzes to generate highly oxidative free radicals and reactive oxygen. This process breaks down organic pollutants formed on the coated surfaces through rupturing of their cell membranes.

Organic pollutants such as bacteria will decompose over time



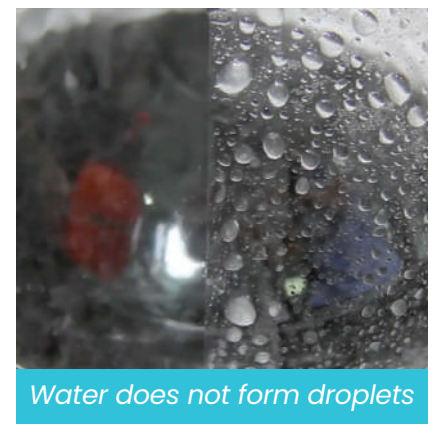
For outdoor units, sunlight helps to make pollutants less adhesive



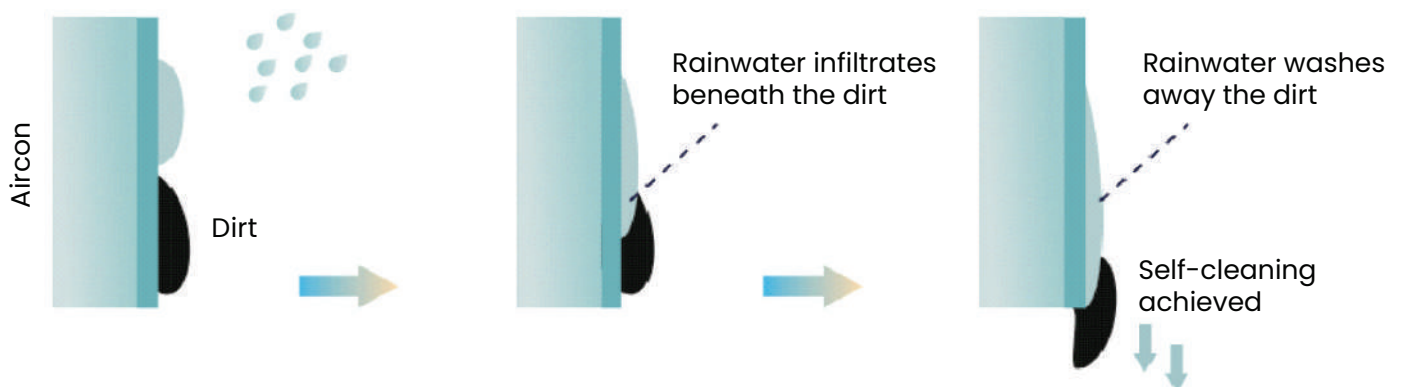
HYDROPHILICITY

Ventiara nano particles keep your outdoor units dirt-free. Coated hydrophilic surfaces allow water to have a contact angle of under 20°, essentially spreading thinly across the surface that enhances it's transparency and easing water outflow.

Our research labs found hydrophilicity to be more effective in self-cleaning than hydrophobicity used in most other solutions. At a molecular level, rainwater flows closer to our coated surfaces and can effectively wash away dirt and grime accumulated on the surfaces.



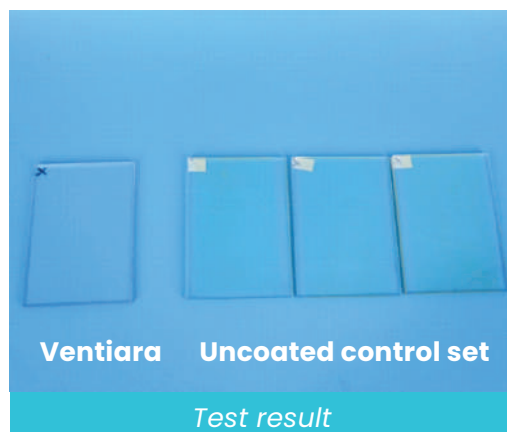
For outdoor units, rain helps to keep them clean



DURABLE

Ventiara comprises fully of inorganic material, giving it long-lasting resistance against weather degradation. Our coating underwent an accelerated aging test and did not exhibit any signs of powdering, adhering to global standards.

A long-lasting solution to low aircon maintenance



Ventiara is widely used commercially:



CONTACT US AT: