





Nanotechnological Antibacterial Treatment











- Protective, transparent, nanotechnological: suitable for all surfaces

💓 It allows you to break down mould, viruses and bacteria, and reduce the adhesion of dirt

🚫 Applied in splits, it sanitizes filters and batteries for over 1 year

The photocatalytic effect reduces pollutants present in the air

Water-repellent effect on treated surfaces

Product suitable for food contact





DESCRIPTION:

High Tech Surface is an antibacterial and hydrophobic protectant, which, thanks to the innovative nanotechnological formulation, protects surfaces from bacteria and viruses. It also eliminates pollutants in the air thanks to the photocatalytic effect.

MAIN FEATURES

CHARACTERISTICS	ADVANTAGES	BENEFITS
Hydrophobicity	Creates ultra-thin nanometric protection	Avoid the formation of areas where water stagnation can occur
Non-stick	Easy to clean	Simplified maintenance for surfaces
Antibacterial/Sanitizing	A shield against viruses, bacteria and mold	Safe to the touch
Depolluting	Degrades pollutants present in the atmosphere	Improved healthiness of the air and environments
High operating temperature range (from –50 to +250°C)	It can be used in environments with high temperatures	It is versatile compared to potential applications

HT Surface it is a surface coating which, thanks to its hydro-repellence and its nanostructure, allows it to have a triple action: it is easier to clean, it creates a shield against viruses and bacteria; degrades polluted substances present in the air.

Sanitization occurs both in the presence of light, thanks to photocatalysis, and in the dark, thanks to its low surface energy, which makes it difficult for microbes to adhere.

The three-dimensional nanostructure present on the surface guarantees the antibacterial effect, an effect that is regenerated every time the surface is cleaned, for the entire duration of the coating.

It does not require the use of specific detergents. It does not contain metallic nanoparticles or biocides. It does not release by-products. View the antimicrobial test of the coating on the filters:



View the Moca Test:







Antibacterial tests that have been carried out have shown superior effectiveness to **99,999%** degradation of the microbial load.

Results obtained with Escherichia coli strain ATCC 8739					
Uo	Ut	At	R	R %	
5.62	4.79	NQ	4.49	>99.99	
Results obt	ained with St	taphylococo	cus aureus st	rain ATCC 6538	
Uo	Ut	At	R	R %	
5.26	4.51	NQ	4.21	>99.99	

Uo: Initial count on untreated specimens, expressed in Logs
Ut: Count after 24 hours of contact on untreated specimens, expressed in Log
At: Count after 24 hours of contact on treated specimens, expressed in Log
R: Antibacterial activity (R= Ut-At), logarithmic difference
R %: Percentage reduction

NOTE: For the tests to be carried out on the untreated material, the Laboratory used an internal plastic material.

HT Surface contains highly oxidizing nanoparticles that confer antibacterial activity on the surface.

HT Surface, in contact with any humidity or stagnant water, also has an antilegionella action.

The reduction of polluting substances present in the air occurs in the presence of light and humidity, due to a photocatalytic effect: the light absorbed by the nanoparticles present inside the coating generates reactive oxygen species which oxidize the polluting molecules, transforming them into substances that are not harmful to the environment (CO2 and H2O).







STORAGE METHOD

HT Surface must be stored in the original packaging, in a dry and cool environment (with a temperature no higher than 25° C and no lower than 5° C). In these conditions the product can be stored for up to 12 months.

HT Surface is available in a 200ml can format.

DANGER



HOW TO USE

Before applying the solution, the container must be shaken well. Important instructions for applying the HT Surface:

- DO NOT apply in windy conditions
- DO NOT apply if the surface is damp or wet (the dew point must NOT be on the surface to be treated)
- DO NOT apply on a surface that is too hot or exposed to the sun, to prevent the solvent from evaporating too quickly and creating unwanted accumulations of product.

OPTIMAL APPLICATION CONDITIONS: temperatures between 5°C and 30°C with relative humidity not exceeding 80%.

CONDITIONS OF CARE: HT Surface reticulates and forms an ultra-thin and transparent coating, already active within 4 hours of application. Its water-repellent protective action is optimal after one/two days of application.

HT Surface is applied by spraying it directly on the surfaces, or manually with a microfibre cloth.







HT Cleaner is a neutral detergent with citrus notes for cleaning all surfaces.

MAIN FEATURES

HT Cleaner creates a surface nanostructure, due to the presence of nanoparticles, capable of protecting against viruses and bacteria, which remains active over time. The sanitizing action is enhanced by light thanks to the photo-catalytic effect generated by the nanoparticles.

HT Cleaner must be stored in the original packaging, in a dry and cool environment (with a temperature no higher than 25° C and no lower than 5° C).

In these conditions the product can be stored for 12 months.

HT Cleaner is supplied in 250 ml packs.



CHARACTERISTICS	ADVANTAGES	BENEFITS
Neutral detergent (pH 7)	Multi surface	It can also be used for delicate materials such as: marble, wood, plastic and glass
It does not produce foam	It doesn't leave streaks	Does not require rinsing and does not create superficial patinas
Sanitiser	Creates a shield against viruses and bacteria	Surfaces that are safer to the touch
It reduces pollution	Degrades pollutants present in the atmosphere	Healthier air and environments

HOW TO USE

Spray HT Cleaner on the surface and rub it with a microfibre cloth; does not require rinsing.







HIGH TECH SURFACE AND HIGH TECH CLEANER: ANTIBACTERIAL AND NANOTECHNOLOGICALS.









RefineAir S.r.I. Via Sabato Visco, 24/C 84131 Salerno (SA) Tel. +39 089 771176 C.F./P. IVA 05518910657

www.refineair.it

