



ANTI-VIRAL AND ANTI-BACTERIAL SANITISERS





Surface Disinfectant

This disinfectant produces high-performance sanitisation of all types of hard surfaces, suitable for food surfaces.



Hand Sanitiser

High performance hand sanitizer solution is suitable for use on the hands, to remove potentially harmful infectious bacteria.

Features and Benefits

- Produces high-performance sanitisation of all types of hard surfaces, suitable for food preparation surfaces and also as a hand sanitisation solution.
- Our Anti-Viral Surface Disinfectant has been laboratory tested against several “enveloped” viruses similar to **COVID-19** and **achieved 99.9-99.99%** kill ratio across the testing range.
- Contain a natural anti-microbial and anti-viral active ingredient found in many foods which is effective against a wide spectrum of bacteria and viruses.
- Our products are **eco-friendly**, due to their all natural formulation process, with active biological ingredients used as opposed to alcohol.
- Our natural ingredients are readily biodegradable and have no aquatic toxicity, thus they offer a greener alternative to conventional alcohol products and **minimise environmental impact.**
- Multi-surfactant combination: Ensures highly effective cleaning. Also includes a natural scale control package that is highly-effective at reducing scales associated with hard water.
- Biocidal effectiveness in compliance with the following standards: EN1276, EN1650, EN13697 and EN 14476+A1.
- Contains no quaternary ammonium salts.
- Our Hand Sanitisation product requires no hazard labelling, reducing requirement for PPE and COSHH.
- Manufactured in accordance with recognised international standards, ISO 9001 and ISO 14001, ensures consistent quality of product.

Safety

- Lactic Acid remains effective at low concentrations.
- Food safe.
- Remains effective at pH 3-5 ~ no harm when in contact with skin.

How our formulas work

Anti-Viral Product

Viruses are sub-microscopic infectious agents, that need a host cell to replicate. They are often composed of a protein coat / capsid / viral envelope that houses the viral genetic information (DNA or RNA). Viruses can live on surfaces for up to 72 hours and can be highly infectious.

Our Anti-Viral Surface Disinfectant kills or inactivates viruses. As with bacteria, viruses have certain properties and characteristics that an anti-viral product will target and destroy or disrupt the virus leaving it incapacitated. In many instances Anti-viral products also have biocidal abilities as their properties are equally disrupted by the anti-viral product.

Our Formula and COVID-19

No company has been able to test against the current COVID-19 Corona virus strain, however, we do know that COVID-19 has a virus 'envelope' structure. This suggests it will be sensitive to our Anti-Viral Disinfectant as it kills 99.9% of similar 'enveloped' viruses in under 5 minutes. As such our leading scientific teams have tested our products against several of these viruses:

HERPES-Simplex 1

H1N1

HIV

Hepatitis B

These viruses have a comparable viral envelope structure and our product achieved a 99.9% kill ratio and even up to 99.99% on certain strains. In addition, our active ingredient is proven to have known virocidal activity vs the SARS corona virus (SARS-CoV) variant.

The use of a proven 'enveloped' virus killer such as our Anti-Viral Disinfectant is particularly important as studies have demonstrated the variable strains can live on surfaces for up to 72 hours (Hulkower et al, 2011).

All our products have been stringently tested and verified according to the European Standard EN 1040, EN 1276 (variable times / exposure of 1 to 5 mins) for Bactericide conformation and the EN 14776 for Virocidal conformation. The same kill score was also obtained versus the Noro and Rhino Viral strains, remembering the large Norovirus outbreak in 2012.

Anti-Viral Testing

EN 14776 Test at 5 minutes contact time					
	H. simp-lex 1	HIV	Hep. B	Noro	Rhino
Anti-Viral & Anti-Bacterial Surface Disinfectant	> Log4	> Log4	> Log3	> Log4	> Log4

Testing

- Tested within a GLP Quality Industrial Laboratory.
- ECHA Data available on Active ingredient testing.

Anti-Bacterial Product

Anti bacterial products are designed to target key features that a bacteria needs to survive and multiply thus killing or inactivating bacteria. This can involve several methods from cell wall destruction to forcing too much liquid inside the bacterial cell forcing it to burst. Inactivation renders the bacteria unable to reproduce effectively, stopping new bacteria forming.

Our active ingredient forces a change in pH generating a more acidic environment for the bacteria. This acidity disrupts bacterial function in multiple ways; acid damages the bacterial cell integrity making the bacterial contents vulnerable, the bacteria must then actively spend energy attempting to remove/ pump the acid outside or trying to produce alkalites to restore pH, all of which exhaust the bacteria and stop its reproduction. Finally the acid generates free radicals that damage all cellular components.

Anti-bacterial **does not** mean anti-viral, as viral and bacterial properties differ.

See next page for Anti-Bacterial Testing.

Anti-Bacterial Testing

Modified DIN EN 1040 Test at 5 minutes contact time

		E. coli	P. aeruginosa	E. hirae	S. aureus
Anti-Bacterial Hand Sanitiser		> Log5	> Log5	> Log5	> Log5

Modified DIN EN 1276 Test at 5 minutes contact time

		E. coli	P. aeruginosa	E. hirae	S. aureus
Anti-Bacterial Hand Sanitiser		> Log5	> Log5	> Log5	> Log5

EN 1276 Test at 1 minutes contact time

		E. coli	P. aeruginosa	E. hirae	S. aureus
Anti-Bacterial Hand Sanitiser		> Log5	> Log5	> Log5	> Log5

Modified DIN EN 1040 Test at 5 minutes contact time

		E. coli	P. aeruginosa	E. hirae	S. aureus
Anti-Bacterial Surface Disinfectant		> Log5	> Log5	> Log5	> Log5

Modified DIN EN 1276 Test at 5 minutes contact time

		E. coli	P. aeruginosa	E. hirae	S. aureus
Anti-Bacterial Surface Disinfectant		> Log5	> Log5	> Log5	> Log5

EN 1276 Test at 1 minutes contact time

		E. coli	P. aeruginosa	E. hirae	S. aureus
Anti-Bacterial Surface Disinfectant		> Log5	> Log5	> Log5	> Log5

Why are our formulas eco-friendly?

Our formulas are alcohol free, the alcohol produced within alcohol hand sanitizers is a costly environmental process with multiple high temperature heating stages within the chemical refraction process, yielding a high CO2 output. As alcohol is the end product of a complex degradation process it has a longer environmental persistence post use.

By contrast our products are eco-friendly, due to their all natural formulation process, with active biological ingredients used as opposed to alcohol. Our natural ingredients are bio-degradable and have no aquatic toxicity thus offer a greener alternative to conventional alcohol products and minimise environmental impact.

Halal

Our products are formulated with all natural ingredients with no meat derivatives and are awaiting Halal approval.
