



## ANTI-VIRAL AND ANTI-BACTERIAL SANITISERS



At **Fluid Science** we are **sanitisation specialists**, with our products having been recently tested, approved and now currently being used within the **UK's largest** waste water treatment and supply facilities, as well as several leading food, drink and pharma companies.



## Anti-Viral **Surface Disinfectant**

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



## Anti-Viral & Anti-Bacterial **Hand Sanitiser**

High performance hand sanitiser solution is suitable for use on the hands, to remove harmful infectious bacteria and viruses.

# Our Range of Products

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## Hand Stand

Contact Free

### Hand Sanitiser Pump

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



Anti-Viral

### Fogger Machine

Highly effective fogging machine bundled with our antiviral disinfectant solution, safe to use near electrical appliances.



Anti-Viral & Anti Bacterial

### Sanitiser Dispensers

Refillable Wall Mounted Dispensers, ideally used in conjunction with our eco-friendly hand sanitiser solution.

# Features and Benefits

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- 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 and Hand Sanitiser has been laboratory tested against several “enveloped” viruses including **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: Modified DIN EN 1040, Modified DIN EN 1276, EN 1276, and EN 14476\* (*\*Anti-Viral solution only*).
- 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

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- 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

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## Anti-Viral Disinfectant & Hand Sanitiser 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 product 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. This product can be used on surfaces and safely on the hands.

## 99.99% Effective against COVID-19.

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Our anti-viral products are scientifically proven to be effective at eradicating COVID-19. UK based BluTest Laboratories completed the latest Gold Standard COVID-19 Vaccinia testing in April 2020, in which our product achieved Log4, resulting in a 99.99% viricidal kill score. Their full test report is available for download, which concludes:

*“ This product therefore is effective against all enveloped viruses as defined in EN 14476:2013 + A2:2019 Annex A\*. This therefore includes all coronaviruses and SARS-CoV-2\* ”*

With the scientific data confirming the virus's capability to live on surfaces for up to 72 hours, our product provides a single liquid toolkit that fully eradicates COVID-19 and other viruses, ensuring a sanitised and safe environment. This Antiviral solution is also effective against:

**HERPES-Simplex 1**

**H1N1**

**HIV**

**Hepatitis B**

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 14476 for Viroidal conformation. The same kill score was also obtained versus the Noro and Rhino Viral strains, remembering the large Norovirus outbreak in 2012.

# Anti-Viral Surface Disinfectant Testing

EN 14476 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

## Log Percent Reduction Key

> Log3 = 99.9% Eradicated.

> Log4 = 99.99% Eradicated.

## Testing

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

# Anti-Bacterial Hand Sanitiser 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 Hand Sanitiser Testing

## Modified DIN EN 1040 Test at 5 minutes contact time

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

## Modified DIN EN 1276 Test at 5 minutes contact time

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

## EN 1276 Test at 1 minutes contact time

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

### Log Percent Reduction Key

> Log5 = 99.999% Eradicated.

## 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.

**Contact Us for more information**

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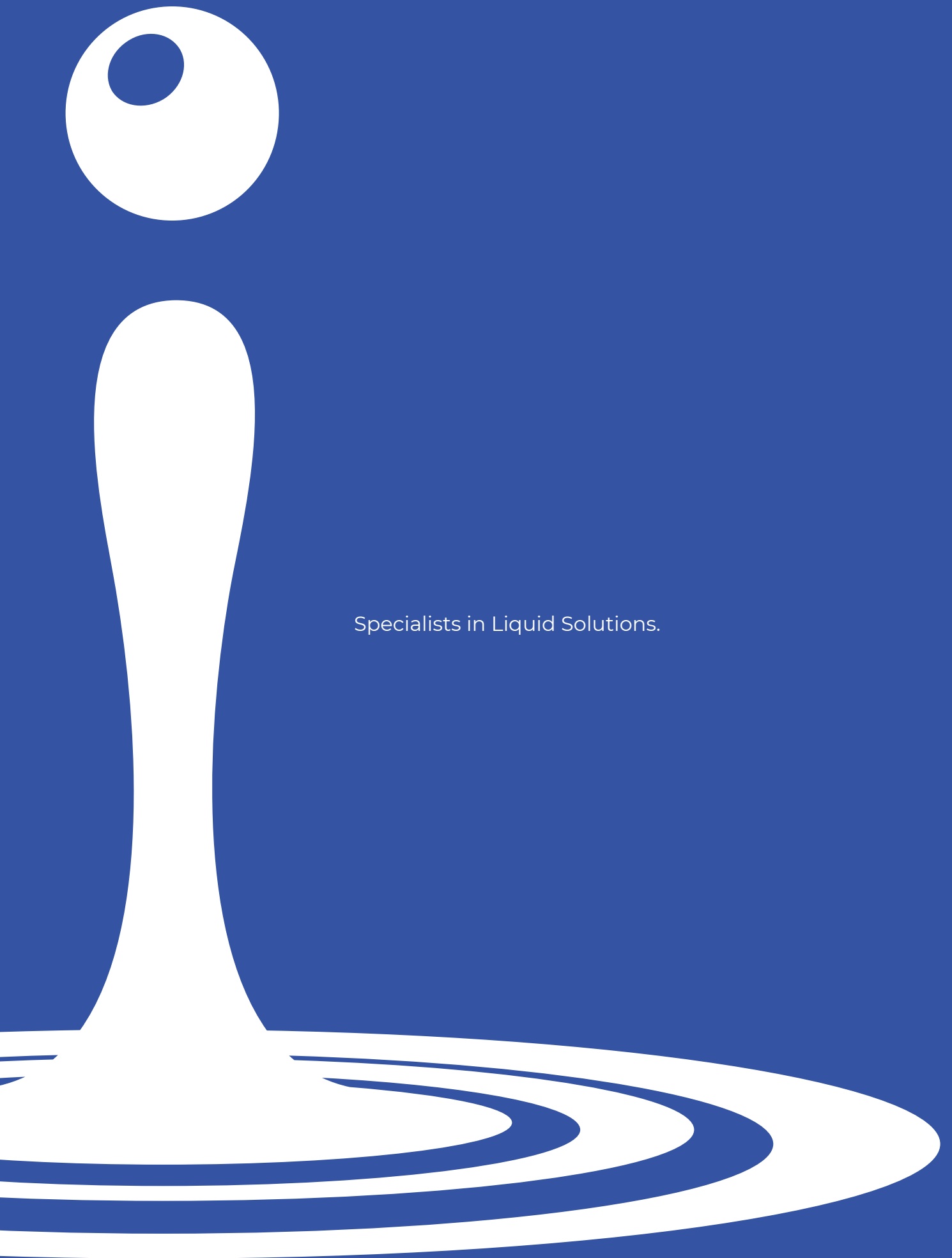
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