

Surface + Hands Key Facts

Product Overview	Key Benefits		
<p>Hybrisan Surface + Hands is a complex polymeric biocide in an aqueous solution providing ongoing bacterial protection to treated hands and surfaces. The product is a ready to use aqueous solution for the disinfection and sanitisation of hands and surfaces.</p> <p>The product is non-toxic, non-irritant, non-hazardous and environmentally friendly. Effective against bacteria up 99.999% to BS EN 1276:2019. Effective against all enveloped viruses as defined in EN14476:2013 + A2:2019 Annex A including all coronaviruses and SARS-CoV2.</p>	<ul style="list-style-type: none"> • Proven superior performance over alcohol based sanitising products • Kills up to 99.999% of germs within 1 minute • Kills a broad spectrum of bacteria and viruses including Covid-19 • Effective against C. diff, unlike alcohol based hand sanitiser • Increased effectiveness with repeated use • Long lasting residual efficacy offering ongoing protection between uses and resistance the formation of biofilm • Biofilm disrupting capability • 100% alcohol, chlorine, bleach and SLS Free • Not tested on animals and vegan friendly • Suitable for all skin types • Doesn't dry out, irritate or damage the integrity or pH level of the skin. Capable of actively moisturising. 		
Hybrisan's Vision	<ul style="list-style-type: none"> • Non hazardous • Non flammable • Fragrance free • Does not promote superbug resistance • Formulation effective to EN 1500 		
<p>Hybrisan are aiming to be the frontline solution to bacterial resistance to standard treatments. The current techniques balance between effectively killing bacteria and damaging the host. At Hybrisan we throw away the balance and just blitz the bacteria down to sterility.</p>			
Regulatory Compliance			
<p>Hybrisan WT Surface & Hand Sanitiser is 100% compliant with all international hand hygiene protocols and the EU Biocidal Products Regulation (BPR, Regulation (EU) 528/2012).</p>			
Multi Material Compatibility	Test	Organism	Log Reduction
<p>The product is non-toxic, non-irritant, non-hazardous, environmentally friendly and compatible with all manufacturing substrates and coating. This means that rapid decontamination is achieved without damaging sensitive equipment as in computers and portable IT. This eradicates the potential of cross contamination during communal usage.</p>	BS EN 1276:2019	<i>E. coli</i> <i>P. aeruginosa</i> <i>S. aureus</i> <i>E. hirae</i>	>6 >6 >6 >6
	BS EN 14476:2013 + A2:2019	<i>Vaccina</i>	PASS



Surface + Hands Technical Data Sheet

Hybrisan Surface + Hands is a complex polymeric biocide in an aqueous solution providing ongoing bacterial protection to treated hands and surfaces. The product is a ready to use aqueous solution for the disinfection and sanitisation of hands and surfaces.

The product is non-toxic, non-irritant, non-hazardous and environmentally friendly. Effective against bacteria up 99.999% to BS EN 1276. Effective against all enveloped viruses as defined in EN14476:2013 + A2:2019 Annex A **including all coronaviruses and SARS-CoV2.**

Pour and Use

Use to refill sanitising stations, spray bottles and hand foamers as required.

As a surface cleaner:

Spray on to surface from a distance of 15-20cm. Leave to act for up to 5 minutes. Wipe away with a damp cloth, sponge or paper towel

As a hand sanitiser:

Apply to hands, massage gently and allow to dry or rinse with clean water if required.

Safety and Storage Information

Use biocides safely and sustainably. It is illegal to use this product for uses or in a manner other than that prescribed on this label.

Safety:

Avoid contact with eyes, should this occur rinse with clean warm water immediately.

Storage:

Store in a cool dry place away from direct sunlight.

Disposal:

Containers are to be disposed of according to national waste legislation requirements.

Weakness of Alcohol Hand Sanitiser

- pH levels of gels are around 3 to 4 which makes them acidic and potentially corrosive
- Special containers required to distribute the product – not compatible with all materials
- Ineffective on soiled/dirty hands due to non-specific reactions with organic material draining efficacy
- Ineffective against C. Diff
- Can wash away natural oils in the skin which cause drying and cracking
- Highly flammable liquid
- Toxic – alcohol toxicity can result in alcohol poisoning

Why Hybrisan Surface + Hands?

- Preliminary evidence shows that Hybrisan has the potential to kill TB
- Hybrisan has been proven to disrupts biofilm which is a significant USP in the decontamination of surfaces (see Biofilm info below)
- The formulation has been optimised to use the absolute minimum requirement of active constituents to produce its efficacy while remaining non-hazardous
- Hybrisan provides a residual protection on a treated surface and this can be enhanced with regular application.
- When applied residual protection is passed on

What is a Biofilm and Why is it Relevant?

Biofilms are all around us, from the slime on rocks in streams (even in hot springs), to washing machines, to our own bodies, for example the dental plaque on our teeth.

A biofilm can be defined as a community of microorganisms adhering to a surface and surrounded by a complex matrix of extrapolymeric substances. It is now generally accepted that the biofilm growth mode induces microbial resistance to disinfection that can lead to substantial economic and health concerns. Planktonic (free floating) microorganisms are relatively easy to kill and basic biocidal application will be adequate to achieve disinfection. However, the recalcitrance of biofilm when established as a microbiological colony presents a far greater challenge to the disinfectant in terms of resistance. In fact they can be 1000 times more difficult to kill.

Although the precise origin of such resistance remains unclear, different studies have shown that it is a multifactorial process involving the spatial organization of the biofilm.

Remarkably, biofilm colonies have the ability to communicate via quorum sensing and this allows them to react to hostile conditions presented by a disinfectant. A biofilm will recognise the premature death of cells at its surface and will close to protect pathogenic bacteria housed within it. When the threat has gone, and the surface condition become favourable and micro-organisms are released from the biofilm to re-infect a surface again. As a result of this, it becomes incredibly difficult to balance the disinfectant concentration to disrupt the biofilm without damaging the surface or skin.