



ABOUT ORGANIC FRESH® SANITIZER

ORGANIC FRESH® Sanitizer is a S4L-Technology based Sanitizer consisting of a carefully formulated compound consisting of unique S4L-Technology flavonoids and extracts. Rated up to the strength of a hospital grade sanitizer, it stands alone as a safe and non-toxic yet powerful germ killer.

Unique in the world, our ranges are carefully formulated RTU sanitizers for specific applications to bring safe and environmentally sustainable sanitizing to the world.

The Technology: Proprietary organic carbon blends.

Acts through a process of cell wall intrusion, complexation of key cations and disruption of protein functioning.

Several ingredients act as powerful wetting and penetrating agents to permeate outer cell defences, then transport other key ingredients to protein sites, thus disrupting normal functioning.

Through these mechanisms, **ORGANIC FRESH®** Sanitizer effectively and efficiently suppresses various pathogenic cellular organisms such as bacteria, fungi and moulds, and non-cellular organisms such as viruses on all surface areas.

All ingredients are food safe.

Flavonoids:

ORGANIC FRESH® Sanitizer is 100% natural combination of flavonoids and plant extracts.

Every ingredient is listed on FDA's GRAS (Generally Regarded as Safe) list.

Rated up to the strength of a hospital-grade sanitizer, it stands alone as a safe and non-toxic, yet powerful germ killer for all sanitizing applications to suppress 99,999% of harmful pathogenic cellular organisms such as bacteria, fungi & moulds and non-cellular organisms such as viruses on all surfaces for a total environment enhancer that is conducive for humans.



None of its components have shown to cause harmful effects with regular use since they occur in many different parts of everyday life from food to human hygiene applications.

What are Flavonoids?

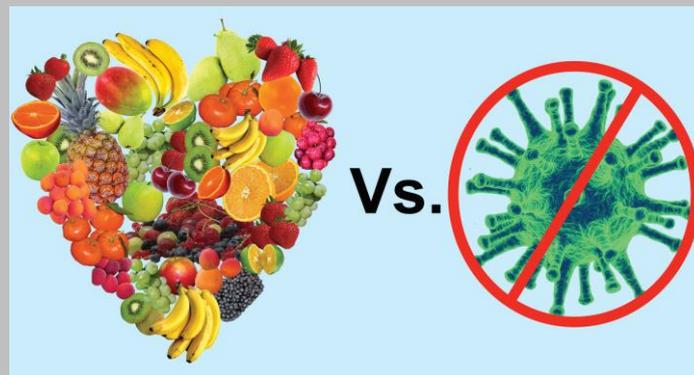
Flavonoids are a diverse group of phytonutrients (plant chemicals) found in almost all fruits and vegetables.

Flavonoids against Viruses:

There are many studies on Flavonoid activity on a wide range of DNA and RNA viruses.

In general, flavonoids work by several mechanisms. Pathogens and other non-cellular micro-organisms can survive for short periods on surface areas due to a variety of support systems.

They can block attachment and entry of viruses into cells, interfere with various stages of viral replication processes or translation and polyprotein processing to prevent the release of the viruses to infect other cells.



Different flavonoids have been found to inhibit viral activity through various mechanisms, namely:

- 1: Flavonoids binding to specific extracellular regions of the virus such as viral proteins present on the capsids.
- 2: Flavonoids that prevent attachment or entry of the virus into host cells. In some cases, flavonoids can bind to virions and modify the virus structure. Though the virus can still internalize, the process of viral un-coating is stalled.
- 3: Early-stage replication inhibitors.
- 4: Transcription and translation blockers.
- 5: Inhibition of late stages of maturation such as inhibition of assembly/packaging and release.
- 6: Flavonoids that can inhibit viral infections by interfering with host factors that are required for successful infection or modulating the immune system to reduce the viral load.

Why ORGANIC FRESH® Sanitizer?

ORGANIC FRESH® Sanitizer is a carefully formulated complex of unique flavonoids and plant extracts focused on the strengthening of the capacity of bacteria and microbes to limit and even eliminate the negative and potentially harmful outcomes of viral and other microbial attacks.

This is particularly well established through the strengthening of cell walls and the stimulation of the immunity system.

The flavonoids and other beneficial compounds in **ORGANIC FRESH®** Sanitizer have shown to stimulate bacteria specific unique restriction patterns in genes to effectively protect host bacteria and microbes through the formation of defence mechanisms, allowing bacteria to chop up potentially harmful foreign DNA (e.g., DNA from bacteria-infecting viruses)



The positive effect of flavonoids on the different aspects of human hygiene have been extensively researched over a very long period and are well practiced.

It is well known that flavonoids have strong antibacterial and antifungal properties. With **ORGANIC FRESH®** Sanitizer, we have succeeded in harnessing some of these very powerful flavonoids into very effective formulations for the benefit of human hygiene.

Advantages:

ORGANIC FRESH® Sanitizer can safely and effectively be applied as General as well as a Hand Sanitizer (D4L-Technology DERMUREL) in programmes and protocols aimed at improving the health and wellness of people and populations.

ORGANIC FRESH® Sanitizer is an easy to use product with easy application technology, making it extremely suitable for application in: • Sanitizer spraying/ fogging- technology • Hand dispensing equipment.

Applications:

- Soft Leafy Vegetables
- Fruit and Vegetables
- General Use
- Heavy Duty kitchen protection
- Walk-through Tunnels/booths/units
- Misting / Fogging
- Hand Sanitizer

What sets ORGANICFRESH® Sanitizers apart from any other Sanitizers on the market?

It is very important to understand that the modes of action of **ORGANIC FRESH®** Sanitizer rather classifies it as a sanitizer than a disinfectant.

It is totally chemical free and non-alcoholic based formulation gives it a more preventative action.

It is not curative and therefore does not disinfect.

It sanitizes as preventative measure. This sets it totally apart from disinfectants.

With **ORGANIC FRESH®** Sanitizer the focus is on the creation and sustaining of a sanitized environment and personal hygiene.

The focus is on doing the right things to prevent infection where possible. Unlike the approach of disinfectants, the focus with **ORGANIC FRESH®** Sanitizer is on virus isolation through host support and preventing infection through protection.

ORGANIC FRESH® Sanitizer versus Alcohol-based Sanitizers:

ORGANIC FRESH® Sanitizer consist wholly of a carefully formulated complex of unique S4L-Technology flavonoids and extracts. This means that all the antibacterial, antifungal, and antiviral properties occur through non-alcohol-based processes.

Does not contain any chemically extracted ingredients in the manufacturing process, hence the CERES organic certification.

It is very important to understand that the modes of action of **ORGANIC FRESH®** Sanitizer rather classifies it as a sanitizer than a disinfectant.

Keeping this in mind it is therefore easy to understand that it's formulated to provide a protective layer on the skin to provide preventative support against pathogenic, harmful or other bacterial, fungal or viral infections through its very unique actions of blocking attachment and entry of viruses into cells,



interfere with various stages of viral replication processes or translation and polyprotein processing to prevent the release of the viruses to infect other cells and zero harmful effect on the skin.

Alcohol has a well-known history of limited success with protective actions to prevent infections whilst it is well known to damage the skin with regular use. This because it permeates the skin layer and interacts with the fat cells under the skin – leading to all sorts of difficulties and uncomfortable skin conditions.

Of course, the flammable nature of alcohol creates immense risks for everyday use.

Difference between a Sanitizer and Disinfectant:

Sanitizers and disinfectants differ in how long they take to work, known as dwell time. Sanitizers can work almost immediately whereas the chemicals in disinfectants take up to 10 minutes to kill germs.

Disinfection means to destroy or irreversibly inactivate specified infectious fungi and bacteria, but not necessarily the spores, on hard surfaces.

THE DIFFERENCE

Sanitizing means to reduce micro-organisms of public health importance to levels considered safe, based on established parameters, without adversely affecting either the quality of the product or its safety.

While disinfection measures may be employed in food processing and preparation, it is much more common to utilize sanitization methods to reduce microbial presence.

KEY VALUE FEATURES:

Independently certified for organic input (CERES organic)

- Highly active and effective against a broad spectrum of micro-organisms.
- Cost effective
- Biodegradable
- Remains active in the presence of organic matter.
- Safe to use in food preparation areas.
- Broad pH activity
- Environment and marine safe
- Non-corrosive and safe, non-toxic to humans

CERTIFIED PRODUCTS:

ORGANIC FRESH® Sanitizer is a S4L-Technology based Sanitizer consisting of a carefully formulated compound consisting of unique S4L-Technology flavonoids and extracts with extensively researched sanitary, health, environmentally friendly and food safety benefits, manufactured through CERES certified organic compliant processes.

- FDA GRAS LISTED
- SABS TESTED, FOOD SAFE

Independently tested to the following standards:

- EN1276:2011
- SANS 1853:2009
- SANS 51650:2011
- SANS 51276:2011



SAFE FOR:

- All public, private, commercial areas
- Private, Commercial and Public transport
- Ports of Entry and Exit
- Aeroplanes
- Schools
- Indoor and Outdoor infrastructure
- Retail and Wholesale department stores
- Industrial Zones and Buildings
- Shopping Malls
- All places of Work, Play and Events
- Safe for people, for pets, for food areas
- Not listed ... inquire with us

FAQ's

Virus isolation through host support, exactly what does this mean? What makes this product effective?

Is it effective against the CoVid-19 virus?

Any virus needs a host to be able to grow and replicate itself. This host is normally another cellular organism like a plant or animal or human cell, or bacterial cell which contains an RNA or DNA configuration. The virus needs to attach itself to this host organism in order to be able to replicate.

This attachment is very specific depending on the type of virus. Every virus is surrounded by a protective protein-like structure that also acts as food source before it attaches to a host. This food source has a limited lifespan therefore viruses cannot float ad infinitum without attaching to a host. Flavonoids have been studied against a wide range of DNA and RNA viruses. In general, flavonoids work by several mechanisms in “fighting” viruses.

They can block attachment and entry of viruses into cells, interfere with or disturb various stages of viral replication processes or translation and polyprotein processing to prevent the release of the viruses to infect other cells. This is known as “virus isolation” or “failure to attach”. The virus does not find a source for replication and becomes isolated – leading to the demise of the virus.

We have sufficient scientific peer reviewed material confirming that at least one of the complexes of flavonoids contained in **ORGANIC FRESH®** actively destroys parts of the attachment mechanism or critical components of the protein layer around the virus, causing it to NOT be able to attach and replicate adequately – leading to its demise and destruction.

ORGANIC FRESH® does not kill – **the virus is destroyed because its life support systems are destroyed by ORGANIC FRESH®.**

We have all the right supportive published scientific reporting that the mechanisms of action of the flavonoids included in **ORGANIC FRESH®** significantly inhibits the ability of corona-type viruses to effectively attach to a host and replicate.

Who uses the product currently?

The product is currently used in different applications in the cosmetic industry, the food preservation industry, and other small businesses where sanitation is important. There are also applications currently installed in walkways of buildings where application is done through larger mist sprays.

How long has the product been available?

The product has been available in different formulations since 2008.



Where is the flagship production facility?

The production has started in South Africa, while new production facilities are currently under development in the United States and Europe.

Briefly, what is the mechanism through which the product effectively performs its antiviral activity?

ORGANIC FRESH® Sanitizer acts through a process of cell wall intrusion, complexation of key cations and disruption of protein functioning. Through these mechanisms **ORGANIC FRESH®** Sanitizer effectively and efficiently suppresses various pathogenic cellular organisms such as bacteria, fungi and moulds, and non-cellular organisms such as viruses on all surface areas.

Is the product safe for humans, especially children, the elderly, and animals?

Yes, it has been approved and certified by all the below institutions:

- Ceres organic approval
- Ceres confirmation of non-chemical content by Eurofins (Germany)
- Confirmation of food safety from SA Dept of Health
- SANAS accredited

The Flavonoid range of products are well known for more than 14 years in the agriculture industry, focus in on the health of all crops. Focus has been put on the microbiome of all living creatures – from plants and animals to humans. The CERES certification explicitly states that the product is safe for use in an environment where humans and animals interact freely – like in an agricultural environment.

Experiential testing in various venues has indicated that **ORGANIC FRESH®** can safely and effectively be applied through sanitising booths without any harmful, detrimental, or hazardous effects. The product has no flashpoint and atomising the active components has a greatly beneficial and positive effect with external surface sanitising as well as the inhalation of the fog.

This is based on the research that suggests and confirms the beneficial health effects of flavonoids.

Will the product cause any harm should I breathe it in?

No, health benefits to exposed individuals whilst promoting a protective and restorative respiratory experience to the individual.

The formulations can be absorbed through the skin and the mucus membranes of the body, nose, mouth and lungs, making it a very suitable carrier for the flavonoids to be absorbed in the bloodstream and as such reach the important infected areas in the respiratory channel which is directly affected by Covid-19.

The positive effect of flavonoids on the different aspects of human health have been extensively researched over an exceptionally long period. This means that, even if there is no direct risk of infection the product still has distinct hygiene benefits for the individual when inhaling it.

This is directly due to the strong beneficial impact of the active flavonoids in the product on the strengthening and improving of the health of the human cells they interact with.

Our own testing has, however, shown that the efficacy of the application of **ORGANIC FRESH®** through sanitising booths is very closely related to a number of specific specs that play an important role in the optimization of surface contact and the availability of atomized flavonoids for inhalation.

Alcohol versus non-alcohol (organic) composition?

Our product is non-alcohol based because alcohol has distinct disadvantages in terms of its acceptability in sanitizing as we formulated it. It is harmful to the skin and has specific disadvantages as solvent for use in mist sprays. Over and above the fact that it damages the skin, the inhalation of alcohol has distinct disadvantages to human health.



This has been extensively documented in the literature. The dangers of using alcohol in a mist spray are well known. The viscosity of alcohol is also not very conducive for use in mist sprays. People who inhale alcohol vapours get drunk very quickly, because the alcohol goes straight to the brain. Alcohol is highly flammable.

ORGANIC FRESH® Sanitizer is a water-based solution with absolutely no flashpoint.

Is the product flammable?

With specific reference to underground mining, our product has NO flashpoint, is NOT flammable and thus is the perfect solution for underground mining environment and is effective above ground too. This is because it is nonalcohol based and non-chemical containing – substances that may cause flammability.

What about the use of chlorine?

The use of chlorine to spray in confined areas is also life threatening if not extremely well controlled at VERY LOW concentrations not exceeding 0.1 – 0.3 ppm. Dosages of 50 ppm as mentioned are deadly and can cause SEVERE human health issues, like pneumatic oedema and other profoundly serious lung diseases.

These will then severely compromise the immunity of the individual and significantly increase the susceptibility to viral and other pathological infections.

Both chlorine and alcohol are implicated as being dangerous substances in the Health and Safety Regulations for Mines.

Do you have significant recommendations from health departments?

WHO advises us to use alcohol-based sanitizers? Have tests been done to prove this theory?

To start off with – there is a particularly important and distinct difference between sanitizers and disinfectants.

Disinfectants are formulated and produced to sterilize the areas where they are applied. That means they kill ALL organisms prevalent in the areas where applied. Sanitizers are formulated and developed to mostly sanitize the environment and surfaces it is used in from harmful organisms leaving beneficial organisms to flourish.

In **ORGANIC FRESH®** Sanitizer the combination of selected flavonoid and plant-based extracts in the formulation contain the active flavonoids that effectively kills harmful organisms. This fungicidal and bactericidal properties in **ORGANIC FRESH®** Sanitizer are duly certified by leading international laboratories.

Earlier in this document we described that our product is non-alcohol based since we use 100% non-alcohol and non-chemical ingredients and production processes that have been certified by leading international laboratories.

ORGANIC FRESH® Sanitizer is not based on a strange theory – it is based on mainstream international research that has been conducted the past 80 years but has been largely ignored.

There is currently ongoing research in leading global institutions on specific aspects and mechanisms of action entrenched and included in **ORGANIC FRESH®** Sanitizer. It has a well-developed and credible scientific base from where it is developed.

Can we get documentation or an official letter stipulating that this product is effective in disinfecting/sanitizing against the covid-19 virus especially to our employees and facilities?

This is not possible due to our certifications and the fact that there are no medical tests to support such claims. The reality is that NO product exists that can be conclusively certified that it can kill Covid-19 in normal everyday human use – internal or external.

No such tests exist readily since it is a protractive and costly exercise. Infection mostly takes place via the mucus membranes in the eyes, mouth, nose and throat – after the virus has been introduced through some transfer activity, like the hands or mucus drops in the air due to sneezing or coughing of carrier



individuals. From there the drive to wash hands. None of the alcohol-based products can be applied anywhere other than the hands. They are mostly harmful to humans when ingested.

ORGANIC FRESH® Sanitizer radically and distinctly differs from this in that it has been CERTIFIED to perform its sanitizing function ANYWHERE it meets harmful organisms.

This INCLUDES the mouth and the nose and the airways to the lungs. Its natural beneficial action on human cells means that, even in the event of no infection it still has a POSITIVE EFFECT on the human cells it encounters.

With or without infection it meets the criteria for beneficial mechanisms of action to benefit human hygiene.

Is ORGANICFRESH® a biocidal substance?

ORGANIC FRESH® is NOT a biocide since it does not meet the definitive description of what a biocide is.

ORGANIC FRESH® is a sophisticated complex of flavonoids and other botanical extracts focusing on the sanitation of contaminated environments. Although it destroys potentially pathogenic organisms, it is also professionally researched and hailed as being immensely powerful in its composition favouring the improvement and sustenance of the general health of the host cells where it makes contact.

Where biocidal active substances are mostly chemical compounds, sometimes containing microorganisms (e.g. bacteria), **ORGANIC FRESH®** contains NO micro-organisms or chemicals, and its ingredients and manufacturing processes have been CERES certified to meet the criteria set for human food safety.

ORGANIC FRESH® does also NOT contain any biocidal active substances or any other non-active co-formulants that ensure the effectiveness as well as the desired pH, viscosity, colour, odour, etc. of the final product.

ORGANIC FRESH® is a carefully and professionally formulated sanitising agent that is focusing on skilfully employing the anti-bacterial, anti-fungal and anti-viral properties of a bouquet of plant-based flavonoids and other botanical extracts in promoting a sanitised living environment whilst actively enhancing the general health of the individual exposed to its sanitising action. This is a unique mechanism of action clearly separating it from biocidal activity.

Available on Request:

- Ceres Confirmation
- Flavonoids as Antiviral Agents Document

Safety Data Sheets: NEW and Specific documentation:

- Organic Fresh Sanitizer -Walk through Booth
- Organic Fresh Sanitizer - Misting
- Organic Fresh Sanitizer -Fogging
- Organic Fresh Sanitizer -Heavy Duty
- Organic Sanitizer Concentrate
- Organic Fresh General Sanitizer



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