



Safertiser Hand and Surface Protection



www.safertiser.com

Safertiser Hand and Surface Protection



24
HOUR

HAND
BARRIER

Safertiser's active ingredients are shown to harness the power of anti-microbial nano-technology to provide a protective layer that is shown to protect against germs for up to 24 hours.



99.99%
PROTECTION

AGAINST
GERMS

Safertiser has been lab verified to kill 99.99% of common pathogens found in homes, school, workplace and hospitals, including the alcohol and antibiotic resistant superbug MRSA.



30
DAY

SURFACE
PROTECTION

Safertiser is shown to be effective after 30 days on hard surfaces. This makes it both safer and more economical to use and gives you and your customers peace of mind.



NO
NASTIES

NO NASTY
CHEMICALS

Safertiser does not contain alcohol, toxins or dangerous ingredients. Instead it uses a mechanical process to kill germs. This makes Safertiser gentle on the skin as well as the environment.



ALL
MECHANICAL

KILLS
SUPERBUGS

Safertiser's ability to burst the nano germ particles as they land, ensures that they can't reform, multiply and mutate, preventing the formation of a superbug.



ALL
NATURAL

NATURAL
INGREDIENTS

Safertiser is a water based formula, using antimicrobial technology derived from natural sand. The preservative used is natural and organic. Safertiser is shown to be less toxic than coffee or vitamin c.



Safertiser's® unique Quaternary Ammonium Compound is classified as Non-Hazardous by numerous internationally recognised agencies, governments and unions such as the World Health Organisation (WHO), the FDA and NZEPA.



Nobel Prize Winning Discovery

In 1935, Nobel Prize winning pathologist, Gerhard Domagk, discovered the first Quaternary Ammonium Compound. Since then, these unique compounds have been studied, developed and used in a range of products, such as, cosmetics, food preparation and now personal protective equipment.

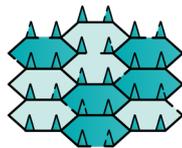
Unlike alcohol based sanitisers which can be classed as hazardous or poisonous, requiring use with caution, Safertiser uses a unique Quaternary Ammonium Compound that's classified as Non-Hazardous by numerous internationally recognised agencies, governments and unions.

Unlike alcohol sanitisers Safertiser does not lose it's sanitising protective qualities in less than the first 30 seconds of application.

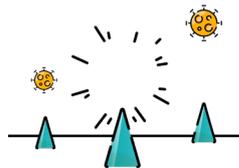
In fact, Safertiser's active ingredient was shown to become more effective after repeated use, without the irritation as found with alcohol based sanitisers.



Apply Safertiser to Hands or Surfaces



This Forms a Protective Nano-Layer



This Nano-Layer Attracts and Rips Apart Pathogens



You Now Have Lasting Virus and Germ Protection

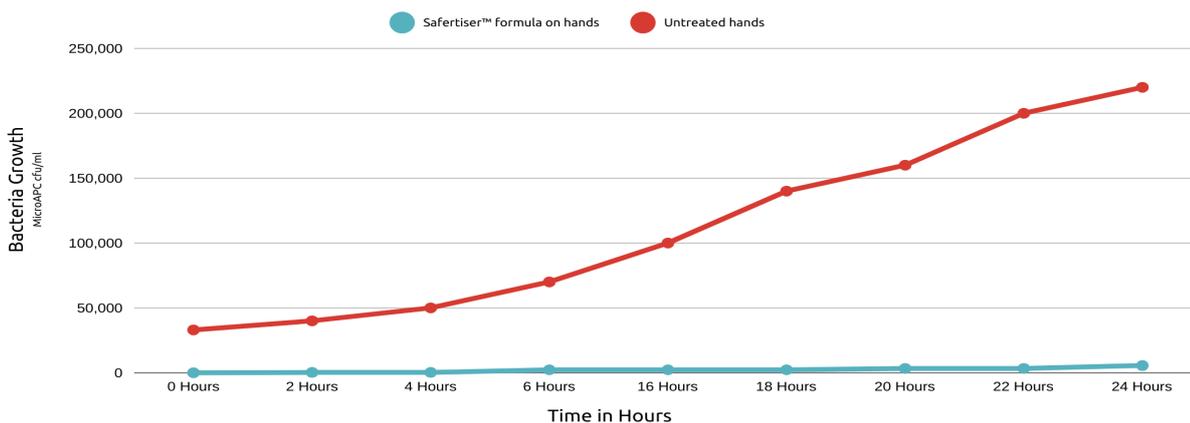
Independent Test Results

Safertiser's formula has been shown to kill most germs, bacteria, viruses and pathogens. It has been dermatologically proven to be safe for use on people with sensitive skin, such as children or the elderly. Below are the results from independent labs, third parties and academic institutions showing the efficacy of Safertiser's formula on common pathogens.

Organism	% Reduction
Escherichia coli	>99.999
Staphylococcus aureus	>99.999
Pseudomonas aeruginosa	>99.999
Enterobacter aerogenes	>99.999
Klebsiella pneumoniae	>99.999
Salmonella Menston	>99.999
Cronobacter sakazakii	>99.999
Listeria monocytogenes	>99.999
Enterococcus faecalis	>99.99
Clostridium perfringens	>99.999
Lactobacillus plantarum	>99.999
Campylobacter jejuni	>99.9
Candida albicans	>99.99
Methicillin-resistant Staphylococcus aureus (MRSA)	>99.999
H1N1	>99.99%
Norovirus (FCV)	>99.99%
COVID-19 Surrogate (Feline Coronavirus)	>99.99%
Vaccinia	>99.99%

Safertiser vs No Safertiser on Hands

Pathogen build up on hands over time. The below graph shows the difference in bacteria growth for hands protected by the Safertiser formula vs untreated hands.



Comparison of Other Solutions

Compared to other disinfecting solutions, Safertiser is more effective, more economical and most importantly, safer.

X = None to Little, XXXXX = High to Certain

Features	Alcohol Sanitisers (denatured)	Alcohol Sanitisers (undenatured)	Alcohol Sanitisers (Aloe Vera/ Vitamin E)	Non Alcohol Sanitisers (Tea Tree)	Safertiser (Quats)
Non-Toxic*	X	XX	XX	XXXXX	XXXXX
Non-Combustible / Non Flammable	X	X	X	X	XXXXX
Won't Cause Blindness with Eye Contact*	X	X	X	X	XXXX
Non-Poisonous if Consumed*	XX	X	X	XXX	XXXX
Can use for Fogging	X	X	X	X	XXXXX
Can be Used Repeatedly*	X	XX	XXX	XXXX	XXXXX
Does not Wash Off*	X	X	X	X	XXXXX
Able to be Used on Pets	X	X	X	X	XXXX
Longevity - lasts over 12 hours	X	X	X	X	XXXXX
Proven to kill 99.99% of bacteria and Viruses	XXXXX	XXXXX	XXXXX	X	XXXXX
Kills 99.99% of superbug MRSA	X	X	X	XX	XXXXX
Safe to Store in a Vehicle	X	X	X	X	XXXXX
Won't Damage Skin or Cause a Rash*	X	XX	XXX	XXXX	XXXX
Eliminates mould spores, combats dampness	X	X	X	X	XXXX
Can Safely Use on Children	X	X	XX	XXXXX	XXXXX
Can Use With Excema	X	XX	XXX	XXXX	XXXX
No Unpleasant Odor	X	XX	XXX	XXXXX	XXXXX
No Unpleasant Taste	X	XX	XXX	XXX	XXXXX
Instant Drying	XXXXX	XXXXX	XXXX	XXXXX	XXXXX
Can be Used as Surface Sprayer*	X	X	X	X	XXXXX
Uses nano Technology	X	X	X	X	XXXXX
Reduces Pathogen Mutation and Resistance	X	X	X	X	XXXXX
WHO, FDA and NZEPA Approved Ingredients*	XX	XXXXX	XXXXX	X	XXXXX
Environmentally Safe	XX	XX	XXX	X	XXXXX
Non-Corrosive	X	X	X	X	XXXXX

Applications

Surface Spray

Standard disinfectants are only effective whilst wet, once rubbed off or dried up they are no longer capable of killing germs. Surfaces are shown to be contaminated to the same levels within 2 to 2.5 hours. Safertiser will keep these areas sanitised for up to 30 days, leaving no sticky residue.

Once bonded, the anti-microbial protection is very difficult to remove. Safertiser provides a 500ml spray bottle, usable across all industries. Due to its non-combustible nature it is ideal in the building, welding and manufacturing industries.

Suggested uses – food preparation, schools, retails, tools & machinery cleaning, household, processing, engineering, welding, building, other manufacturing.



Hand Sanitiser Bottles

Safertiser provides a protective layer on your skin, which will last up to 24 hours, regardless of the number of times you wash or rub your hands, or in the case of young children, where you stick your hands. This product is non-toxic, water based and gentle on your hands. Not only can you use Safertiser on a regular basis without adverse effect, but you effectively only have to use it once a day. Unlike alcohol sanitisers there is no odour or residual after taste and it is not toxic, therefore ideal for restaurants and food preparation.

Suggested uses - Ideal for young, sensitive skin, eczema sufferers, people who need to use sanitiser on a regular basis throughout the day, tradesmen, people too busy to constantly apply sanitiser, schools, hospitals, restaurants, hospitality.

Available in a 100ml or 500ml choice of dropper, spray or foamer bottle.

Fogging of Large Areas

This is a very economical way to sanitise large surfaces and areas. 15ml will fog approximately 1 m³ of surface area.

This includes hard to reach spaces. Safertiser provides a 5 litre refill bottle solution, usable in all fogging machines.

Suggested uses – manufacturing plants, food processing, malls, airports, schools, planes, office blocks, other industrial.

Electro-static Guns and Foggers for Hard to Reach Areas

Safertiser contains anti-microbial polymers that form a barrier of positively charged microscopic spikes. COVID and other viruses are negatively charged, as are all surfaces. The positively charged molecules attach and bond to the negatively charged particles, rupturing the bacteria or pathogen when they come into contact.

An electro-static gun or fogger will add even more positive charge to the Safertiser molecules, ensuring that they directly search out the covid or virus pathogen molecules and they attach to the undersides of surfaces and harder to reach areas. Electro-static foggers and guns are the latest advances in industrial fogging and sanitising solutions. The Safertiser 5 litre refill bottle can be used in all electro-static devices.

Suggested uses – transport industries, manufacturing, vehicle cleaning, furniture.



Contactless Foaming Dispensers

For people on the run and schools Safertiser can be applied to any standard foaming soap dispenser. These are often used in schools as children and staff enter and exit a building, airports, shops, supermarkets and large office buildings. They are fast and efficient and avoid the need for queues.

Safertiser recommends the 5 litre refill bottle to use in these dispensers. Safertiser can source these dispensers for you if required.

Suggested use – schools, hospitals, malls, hotels, supermarkets, large office buildings, toilets, airports, restaurants and bars.





The World Health Organisation (WHO) recommend using products with Quaternary Ammonium Compounds in their ‘Laboratory biosafety guidance related to the novel coronavirus (2019-nCoV) dated 12/02/2020’ saying, “Appropriate disinfectants with proven activity against enveloped viruses should be used (e.g. quaternary ammonium compounds).”

Safertiser’s active ingredient has over 1,643 unique registrations and approvals with the United States Environmental Protection Agency (USEPA), Canadian Government, Australian Government, New Zealand Environmental Protection Authority (NZEPA), European Union (EU), United Nations (UN) and World Health Organisation (WHO).

Quats are positively-charged surface agents (surfactants). Quats bind well to negatively-charged bacterial membranes. This accounts for the fast speed of kill and broad spectrum activity associated with quats. Just as a piece of steel is attracted to and attaches itself to a magnet, quats attach themselves to an organism’s cell walls. This causes the cell wall to break down. Once this occurs, the cell is destroyed.



Non-Toxic to Humans in Safertisers® Level of Concentration



Approved for use Against Common Bacteria, Viruses and Pathogens Including COVID-19



Non-Pollutant



Non-Ozone Depleting Substance



Non-Hazardous Substances for the Purpose of International Trade

Approvals and Endorsements

New Zealand Environmental Protection Authority (NZEPA)

- <https://epa.govt.nz/database-search/chemical-classification-and-information-database-ccid/view/13823>
- Approval Number: HSR005673
- CAS Number: 68424-85-1

Canadian Government Approved compound for use against SARS-CoV-2 (COVID-19)

- <https://www.canada.ca/en/health-canada/services/drugs-health-products/disinfectants/covid-19/hand-sanitizer.html>
- <https://www.canada.ca/en/health-canada/services/drugs-health-products/disinfectants/covid-19/list.html>

World Health Organisation Recommended Compound for use against SARS-CoV-2 (COVID-19)

- https://www.who.int/docs/default-source/coronaviruse/laboratory-biosafety-novel-coronavirus-version-1-1.pdf?sfvrsn=912a9847_2 [Section 3.c. Appropriate Disinfectants]
- On 12 February 2020, the World Health Organisation (WHO) recommended labs use the same active ingredient* in Safer Sanitiser to disinfect and sanitize as there was sufficient evidence to suggest it has proven efficacy against enveloped viruses, such as COVID-19. (*Quaternary Ammonium Compounds/Benzalkonium chloride.)
- WHO Laboratory biosafety guidance related to the novel coronavirus (2019-nCoV) dated 12/02/2020: "Appropriate disinfectants with proven activity against enveloped viruses should be used (e.g. quaternary ammonium compounds)."

Over **203** unique United States Environmental Protection Agency (USEPA) Registrations and Approvals for using Quaternary Ammonium against SARS-CoV-2

- <https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2>
- The FDA has delegated the EPA to review and approve Emerging Viral Pathogen Claims for SARS-CoV-2.

Over **1442** unique FDA approved registrations.

- <https://www.fda.gov/drugs/drug-approvals-and-databases/national-drug-code-directory> [NDC Database File]

US EPA Substance Registry Services

- https://iaspub.epa.gov/sor_internet/registry/substreg/searchandretrieve/advancedsearch/externalSearch.do?p_type=CASNO&p_value=68424-85-1
- Internal tracking number: 429654

Australian Government: The active in Safer Sanitiser is not subject to any specific national environmental regulations.

- <https://www.nicnas.gov.au/chemical-information/imap-assessments/imap-assessments/tier-ii-environment-assessments/benzalkyl-quaternary-ammonium-surfactants>
- The chemicals in this group are not listed under Schedule 1 (the Toxic Substances List) of the Canadian Environmental Protection Act 1999 (CEPA 1999) (Government of Canada, 2013b).
- Government of Canada (2013b). List of Toxic Substances in Schedule 1 of the Canadian Environmental Protection Act, 1999 (CEPA 1999). Accessed 19 April 2016 at <http://www.ec.gc.ca/>.

According to the UN the chemicals in this group are not currently identified as Persistent Organic Pollutants (UNEP, 2001), ozone depleting substances (UNEP, 1987), or hazardous substances for the purpose of international trade (UNEP & FAO, 1998).

UNEP (1987). The Montreal Protocol on Substances that Deplete the Ozone Layer. United Nations Environment Programme, Ozone Secretariat, Nairobi, Kenya. Accessed 12 March 2016 at <http://ozone.unep.org/>.

UNEP (2001). The Stockholm Convention on Persistent Organic Pollutants. United Nations Environment Programme, Secretariat of the Stockholm Convention, Châtelaine, Switzerland. Accessed 12 November 2013 at <http://www.pops.int/>.

UNEP & FAO (1998). The Rotterdam Convention on the Prior Informed Consent procedure for Certain Hazardous Chemicals and Pesticides in International Trade. United Nations Environment Programme and Food and Agriculture Organization of the United Nations, Châtelaine, Switzerland. Accessed 12 November 2013 at <http://www.pic.int/>.

1 Product and Company Identification

Product Name: SAFERTISER National Poison Centre(24 hours): 0800 POISON [764 766

Proper Shipping name Non-Alcohol Hand Sanitiser 29th March 2020

Recommended Use:

Safer NZ Ltd.

Company Details

5 Kingsford Smith Drive,

Address:

Rangiora, 7400

New Zealand

+64 272187796

2 Hazard(s) Identification

Dangerous Goods: Not classified as hazardous according to criteria in the Hazardous Sub-

3 Hazard(s) Identification

<i>INGREDIENT</i>	<i>CAS NO.</i>	<i>CONTENT</i>
Benzyl-C12-16 Alkyldimethyammonium Chloride	68424-85-1	<8%
Preservatives		<8%
Conditioners		>2%

All other ingredients deemed to be non hazardous.

4 First-Aid Measures

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

IF ON SKIN (or hair): Remove/Take off all contaminated clothing. Rinse skin with water/show-er. Wash with water. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

IF INHALED: Not a likely route of exposure.

5 Fire-Fighting Measures

FLASHPOINT: N/A

HAZCHEM CODE: N/A

EXTIGUISHING MEDIA: N/A

6 Spillage, Accidental Release Measures

MINOR SPILL: Clean up spills immediately. May get slippery.

MAJOR SPILL: Clear area of personnel. Stop leak if safe to do so. Contain spill with sand, earth. Collect recoverable product into labelled containers for recycling. If it enters waterways dilute as much as possible.

7 Handling and Storage

HANDLING: Open container slowly to relieve any pressure. Lift safely.

STORAGE: Keep away from children, keep out of di-

8 Properties

APPEARANCE: Clear slightly viscous liquid

ODOUR: N/A

FLASH POINT: N/A

9 Exposure Controls and Personal Protection

ENGINEERING CONTROLS: N/A

EYE/FACE PROTECTION: Gloves and glasses are suggested with any chemical.

BODY PROTECTION: N/A

10 Toxicological Information

Product has been formulated to be as environmentally and user friendly as possible. At the strength this has been formulated and how it is to be used it is not deemed to be toxic to humans.

11 Stability and Reactivity

STABILITY OF THE SUBSTANCE: Stable

CONDITIONS TO AVOID: Exposure to excessive heat and direct sunlight.

MATERIALS TO AVOID: Strong oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS: N/A

CONDITIONS CONTRIBUTING TO HAZARDOUS

POLYMERIZATION: Will not occur.

12 Disposal Considerations

Care should be taken to ensure compliance with national, regional and local authority regulations. Ensure that empty packaging is allowed to dry. Product can be offered for recycling, recovery or disposal through a suitably qualified or licensed contractor.

13 Ecological Information

Avoid contaminating waterways.

14 Transport Informations

N/A

15 Regulatory Information

Hasno Classification: N/A

Hasno Group Standard: N/A

Hasno Classes: N/A

Other Information

New Zealand National Poison Information Centre (24 hours): 0800 POISON [764 766]

New Zealand Emergency Services: 111

Safertiser Hand Sanitiser

Safer NZ Ltd. has taken care in compiling this information. No liability is accepted directly or indirectly from its application as conditions of use are outside the Company's control. End users are obliged to conform to relevant Local Government regulations.

End of Safety Data Sheet

**Internationally
Certified**



**Scientifically
Proven**



Non-Flammable



Non-Toxic



**Certified
NZ Made**





Safetiser

Safer NZ

5 KINGSFORD SMITH DRIVE, RANGIORA

Contact us at info@safertiser.com

W: www.safertiser.com