

Covid-19 Protection and Prevention solutions

Through Effective mass sanitization by Fogging system.

Fogging the most ecofriendly & uninvasive way of dispensing disinfectant solution to humans.



EPSILON

Savvish Prefabricated Systems

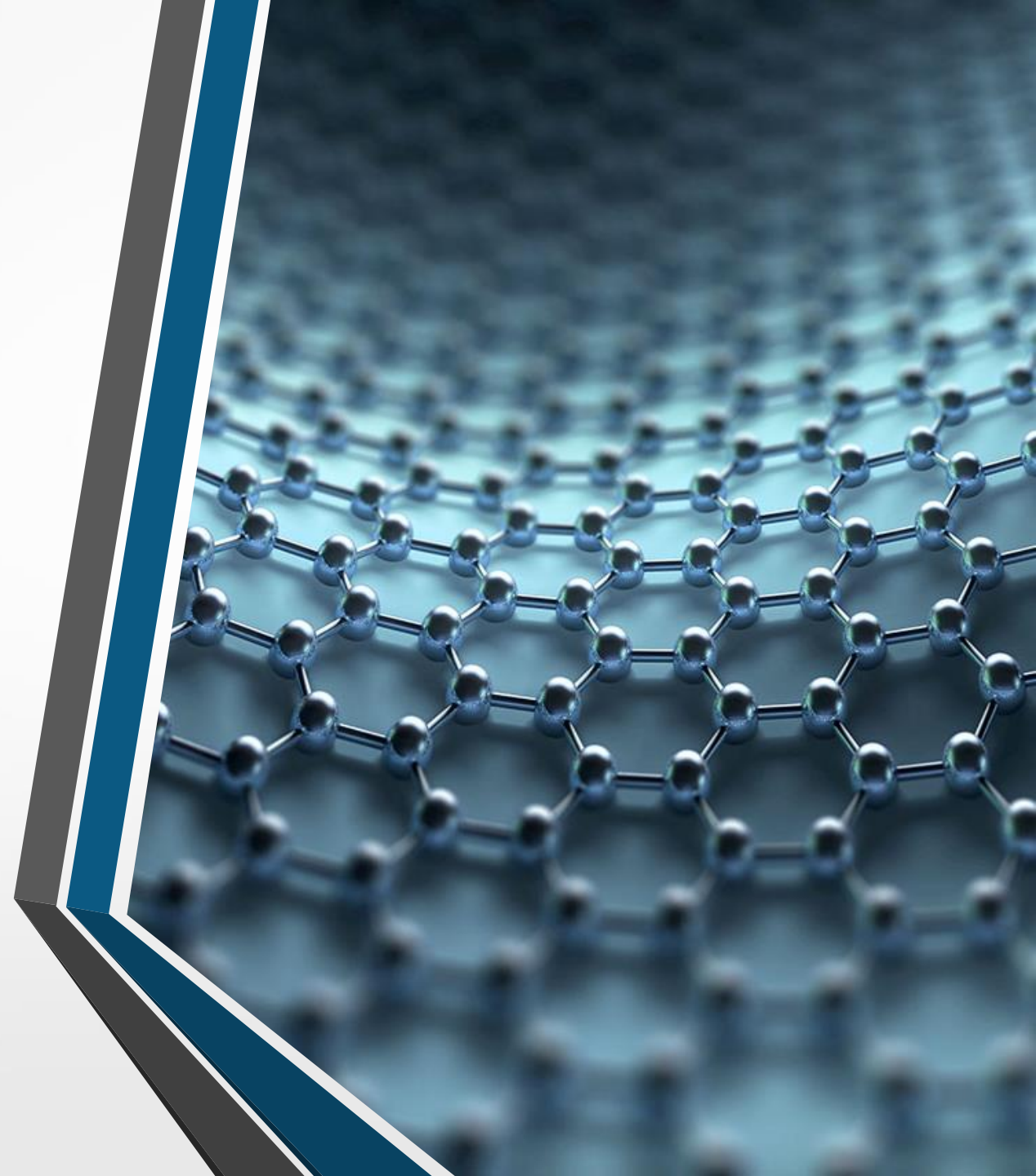
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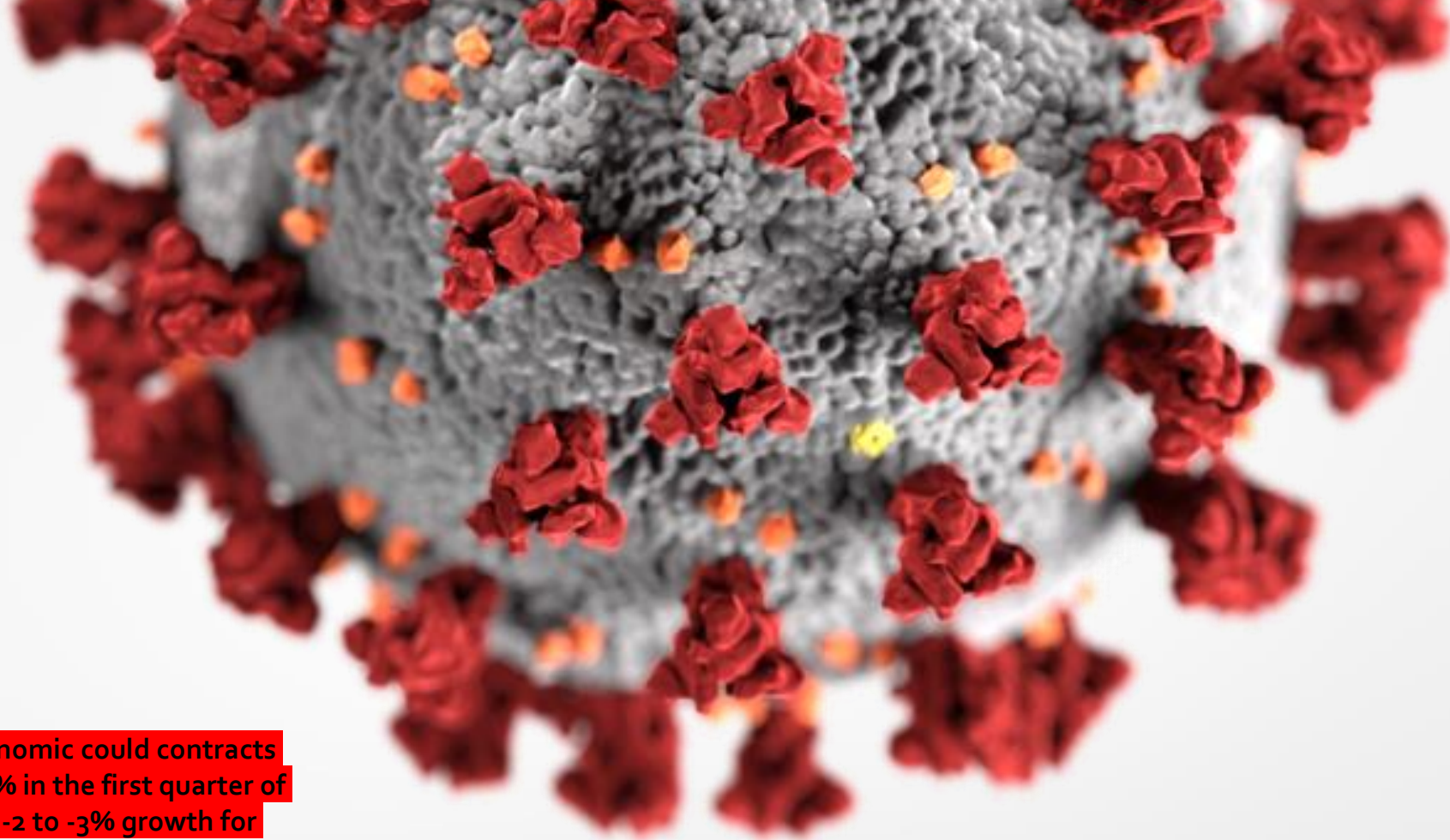


India is on the stage three where we can either lift our economy once again with a good start or we can let it sink

In scenario 1, the economy could contract by about 10% in the first quarter of fiscal year 2021

With GDP growth of 1to 2% in fiscal year 2021. in this scenario, the lockdown would be relaxed after April 15th, 2020 (the 21-days deadline is due to expire),with appropriate protocols put in place for the movement of goods and people after that. Economic modelling suggests that even in this scenario of relatively quick rebound, the livelihoods of 8 million workers, including many who are in the informal workforce, could be affected. In other words, 8 million people could have their ability to subsist and afford basic necessities, such as food, housing and clothing, put at sever risk .corporate and micro-, small-, and medium-, size enterprise (MSME) failure ,non-performing loans (NPLs) in the financial system could rise by three to four percent points of loans. Amount of government spending required to protect and revive households, companies, and lenders could therefore be in region of 6 lakh crore Indian rupees (around 79 billion dollar) for three percent of GDP.





In scenario 2, the economic could contracts sharply by around 20% in the first quarter of facial year 2021, with -2 to -3% growth for facial year 2021.

here, the lockdown good continue in roughly its current form until mid-main 2020, followed by a gradual restarting of supply chains. This could put 32 million livelihoods at risk and swell NPLs by 7 percentage points.the cost of stabilizing and protecting households, companies, and lenders code exceed 10 lakh crore Indian rupees (exceeding 130 billion dollar) or more than five percent of GDP.

In scenario 3 could mean and even Deeper economic contraction of around 8 to 10% for facial year 2021.

this could occur if the virus flares up a few times over the rest of the year, necessitating more lockdown, causing even greater reluctance among migrants to resume work, and ensuring a much slower rate of recovery.

Ultrasonic Disinfectant Fogger

To meet the extraordinary situation due to SARS Cov 2 and balance between continuing economic activity.

we have been manufacturing ready to use ultrasonic disinfecting fogger machines for sanitation / disinfectant tunnels and chambers that help people to stay protected from COVID-19 virus

the serious global situation has led us to create a solution that can be of public value; it is also available in form of machine which generates ample fog to dispense disinfectant in gaseous form so that it does not harm humans , clothings and surrounding area.

Which can later be connected to a tunnel or chamber for sanitizing people and codes including electronics.

this machine is equipped with state-of-the-art SMPS system coupled with motion detectors, water level sensors and indicators. We suggest W.H.O , DuPont and DRDO approved disinfectant solutions.

this complete system is capable of generating fog that sanitizes complete human body within few seconds with no damage to electronic gadgets since it is based on atomization of disinfectant solution



Technical Specification of Epsilon Disinfectant fogger



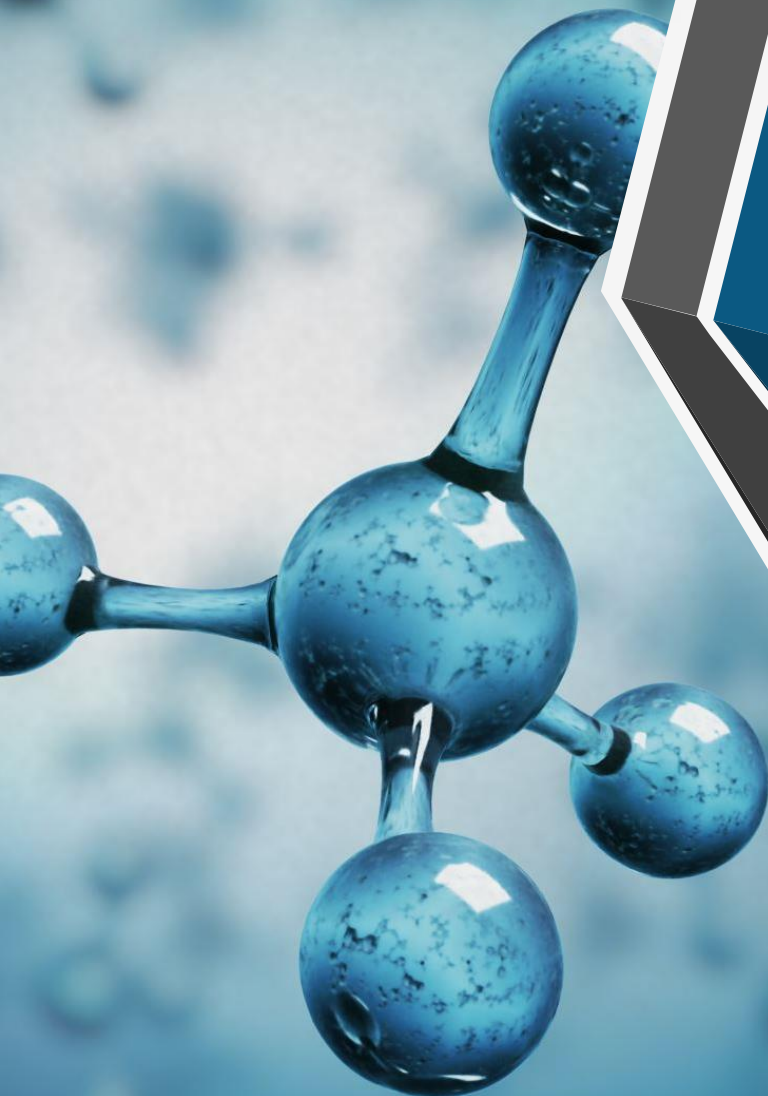
- Input supply-220 V AC , single phase
- Current - 1.5 amps
- Power-300 watts
- Disinfectants consumption- 4 to 5 litres per hour
- Automatic water level control
- Inbuilt motion detector on system
- light - indicates disinfectant time duration
- Sound alert system suitable for blind person
- Size (L x B x H) - 450 mm x 150 mm x 400 mm
- Weight -14 kgs
- Body - powder coated stainless steel
- 4-inch PVC pipe output for further connection
- ½" input connection point
- W.H.O , Du Pont and DRDO approved disinfectants used and in right concentration.
- Suitable for 4 feet x 4 feet x 8 feet chamber for maximum output from Fogg, for larger containment area, additional fogging machine to be used as per client's preference

Fully loaded Epsilon
disinfectant fogger complete
with integrated Electronics,
Motion sensor control, water
level indicator & controller.
Inlet and Outlet pipe ready to
Plug & Play

Generates fog approximately
in 4-7 seconds



PARTICULAR	SPRAY	MIST	ULTRASONIC FOGGER
SYSTEM	Electromechanical Pumping System	Electromechanical Pumping System	Ultrasonic fog Generator
SOPHISTICATION OF SYSTEM SUITABLE	Primitive (Agro & Workers)	Average Factory Workers/Outdoors	Truly Engineered Solution Offices, Malls, Hospitals etc.
DISINFECTANT DELIVERY SYSTEM	Garden Hose & Sprinkler	Pump & fine nozzle Spraying liquid	Disinfectant fog generator with induced draft
EFFECT OF SANITATION SOLUTION ON HUMAN BODY	Leaves solution on body affects color of clothes	Leaves solution on body in fine particle affects color of clothes	Leaves no trace of evaporates no adverse effect at all.
DISINFECTANT CONSUMPTION & AVERAGE COST/PERSON	1.5- 2 INR/ Person 15-16 liters/ Hour	1 INR/ Person 8-10 liters/ Hour	0.30 to 0.50 INR/Person. 4-5 liters/Hour
OPERATION	Needs confined space	Needs confined space or Tunnel	Confined space is better however it can be operated in any closed room
USE DISINFECTANT DRAIN	Drain is Required	Needs drain for water collection	Drain is not required
OVERALL COST	Low CAPEX but high OPEX	Medium CAPEX & Medium OPEX	Little above average CAPEX but low OPEX
AESTHETICS	Poor Aesthetic	Medium Good Aesthetic	Excellent Aesthetic
ENVIRONMENT FRIENDLY	Non environment friendly	Non environment friendly	Environment friendly



W.H.O approved disinfectant chemicals

Bleach-Sodium hypochlorite

Alcohol

Quaternary Ammonia

Pentapotassium bis(peroxymonosulphate)
bis(sulphate)

Epsikon SaniCov™

DRDO & W.H.O Recommended Disinfectants

G.1. Alcohol

Alcohol is effective against influenza virus (252). Ethyl alcohol (70%) is a powerful broad-spectrum germicide and is considered generally superior to isopropyl alcohol. Alcohol is often used to disinfect small surfaces (e.g. rubber stoppers of multiple-dose medication vials, and thermometers) and occasionally external surfaces of equipment (e.g. stethoscopes and ventilators). Since alcohol is flammable, limit its use as a surface disinfectant to small surface-areas and use it in well-ventilated spaces only. Prolonged and repeated use of alcohol as a disinfectant can also cause discoloration, swelling, hardening and cracking of rubber and certain plastics.

G.2. Bleach

G.2. Bleach

Bleach is a strong and effective disinfectant – its active ingredient sodium hypochlorite is effective in killing bacteria, fungi and viruses, including influenza virus – but it is easily inactivated by organic material. Diluted household bleach disinfects within 10–60 minutes contact time (see Table G.1 below for concentrations and contact times), is widely available at a low cost, and is recommended for surface disinfection in health-care facilities. However, bleach irritates mucous membranes, the skin and the airways; decomposes under heat and light; and reacts easily with other chemicals. Therefore, bleach should be used with caution; ventilation should be adequate and consistent with relevant occupational health and safety guidance. Improper use of bleach, including deviation from recommended dilutions (either stronger or weaker), may reduce its effectiveness for disinfection and can

- Organic materials inactivate bleach; clean surfaces so that they are clear of organic materials before disinfection with bleach.
- Keep diluted bleach covered and protected from sunlight, and if possible in a dark container, and out of the reach of children.

Publication Details

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Sanitary workers must use separate set of cleaning equipment for toilets (mops, nylon scrubber) and separate set for sink and commode). They should always wear disposable protective gloves while cleaning a toilet.

Areas	Agents / Toilet cleaner	Procedure
Toilet pot/ commode	Sodium hypochlorite 1%/ detergent Soap powder / long handle angular brush	<ul style="list-style-type: none"> • Inside of toilet pot/commode: • Scrub with the recommended agents and the long handle angular brush. • Outside: clean with recommended agents; use a scrubber.
Lid/ commode	Nylon scrubber and soap powder/detergent 1% Sodium Hypochlorite	<ul style="list-style-type: none"> • Wet and scrub with soap powder and the nylon scrubber inside and outside. • Wipe with 1% Sodium Hypochlorite
Toilet floor	Soap powder /detergent and scrubbing brush/ nylon broom 1% Sodium Hypochlorite	<ul style="list-style-type: none"> • Scrub floor with soap powder and the scrubbing brush • Wash with water • Use sodium hypochlorite 1% dilution
Sink	Soap powder / detergent and nylon scrubber 1% Sodium Hypochlorite	<ul style="list-style-type: none"> • Scrub with the nylon scrubber • Wipe with 1% sodium hypochlorite
Showers area / Taps and fittings	Warm water Detergent powder Nylon Scrubber 1% Sodium Hypochlorite/ 70% alcohol	<ul style="list-style-type: none"> • Thoroughly scrub the floors/tiles with warm water and detergent • Wipe over taps and fittings with a damp cloth and detergent. • Care should be taken to clean the underside of taps and fittings. • Wipe with 1% sodium hypochlorite/ 70% alcohol
Soap dispensers	Detergent and water	Should be cleaned daily with detergent and water and dried.

W.H.O guidelines

- 70% Alcohol can be used to wipe down surfaces where the use of bleach is not suitable, e.g. metal. (Chloroxyleneol (4.5-5.5%)/ Benzalkonium Chloride or any other disinfectants found to be effective against coronavirus may be used as per manufacturer's instructions)
- Always use freshly prepared 1% sodium hypochlorite.

2. COMPOSITION / INFORMATION ON INGREDIENTS

General Description

PROTEK SURFASAN
A proprietary blend of quaternary ammonium compound and special surfactants – 3 to 6 %
Isopropanol < 5 %.

Hazardous Ingredients

None.

3. HAZARD IDENTIFICATION

Classification – Non – dangerous product.

Human Health & Environmental Hazards

Inhalation

No adverse impact known.

Ingestion

Harmful.

Skin contact

No adverse impact known.

Eye contact

Causes irritation.

4. FIRST AID MEASURES

General Advice

Normal use, no special measures required.

Inhalation

Normally not applicable. Precautionary move to fresh air.

Ingestion

Rinse out mouth with plenty of water and then drink one or two glasses of water.

Skin Contact

Normally not applicable. For prolonged usage, one may use protective gloves.

Eye Contact

Wash with plenty of clean water till irritation subsidize.

If persistent symptoms, consult medical practitioner with MSDS.

SAFETY DATA SHEET

**Virkon® S**

Version 3.0

Revision Date 10.07.2014

Document no. 130000014173

This SDS adheres to the standards and regulatory requirements of New Zealand and may not meet the regulatory requirements in other countries.

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product name : Virkon® S

Recommended use of the chemical and restriction on use
Recommended use : Disinfectant

Manufacturer, importer, supplier
Company : DuPont (New Zealand) Limited
Street address : Level 1, 14 Ormiston Road, East Tamaki, Auckland 2016
New Zealand
Telephone : 0800 658080
Telefax : (09)-271-2961

Emergency telephone number : NZ Poisons Information Centre Ph: 0800 764766
24-hour Medical Emergency: 0800 111174
Transport Emergency: 0800 658080

2. HAZARDS IDENTIFICATION

Classified as hazardous according to criteria in the HS (Minimum Degrees of Hazard) Regulations 2001
Not classified as a Dangerous Good under NZS 5433

HSNO Classification:

6.1E : Acute toxicity (Oral)
6.1D : Acute toxicity (Inhalation)
6.1E : Acute toxicity (Dermal)
6.3A : Skin irritation
8.3A : Serious eye damage
9.1D : Aquatic toxicity (Acute or Chronic)

Endpoints which are not classified, cannot be classified or are not applicable are not shown.

Label content
Pictogram



Signal word : Danger

Hazardous warnings : May be harmful if swallowed.
May be harmful in contact with skin.
Causes skin irritation.
Causes serious eye damage.
Harmful if inhaled.
Toxic to aquatic life.

Precautionary : Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.

**Du Pont
chemical for
sanitization**

SAFETY DATA SHEET

**Virkon® S**

Version 3.0

Revision Date 10.07.2014

Document no. 130000014173

statements

Wash skin thoroughly after handling.
Use only outdoors or in a well-ventilated area.
Avoid release to the environment.
Wear protective gloves.
IF ON SKIN: Wash with plenty of soap and water.
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Immediately call a POISON CENTER or doctor/ physician.
Specific treatment (see supplemental first aid instructions on this label).
If skin irritation occurs: Get medical advice/ attention.
Take off contaminated clothing and wash before reuse.
Dispose of contents/ container to an approved waste disposal plant.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature : Mixture

Components

Chemical Name	CAS-No.	Concentration
Pentapotassium bis(peroxymonosulphate) bis(sulphate)	70693-62-8	40 - 55%
Sodium C10-13-alkylbenzenesulfonate	68411-30-3	10 - 12%
Malic acid	6915-15-7	7-10%
Sulphamic acid	5329-14-6	4 - 6%
Sodium toluenesulphonate	12068-03-0	1 - 5%
Dipotassium peroxodisulphate	7727-21-1	<3%
Dipentene	138-86-3	<0.25%

4. FIRST AID MEASURES

Never give anything by mouth to an unconscious person. When symptoms persist or in all cases of doubt seek medical advice.

Inhalation : Remove from exposure, lie down. If victim has stopped breathing: Artificial respiration and/or oxygen may be necessary. Consult a physician.

Skin contact : Wash off immediately with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing before re-use. Consult a physician.

Eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Call a physician immediately.

Ingestion : Do NOT induce vomiting. If a person vomits when lying on his back, place him in the recovery position. Drink 1 or 2 glasses of water. Never give anything by mouth to an unconscious person. Call a physician immediately.

Most important symptoms/effects, acute and delayed : No information available.

Protection of first-aiders : No information available.

Notes to physician : No information available.



Rely+On™ Virkon®

POWERFUL BROAD SPECTRUM
VIRUCIDAL DISINFECTANT

- Unique formulation
- Effective against a broad spectrum of disease-causing pathogens
- For use in medical facilities, pathology and biosafety containment laboratories, treatment salons and residential homes



The miracles of science™



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The broad spectrum formulation of Rely+On™ Virkon® is unique. No other disinfectant has the same powerful composition or extensive portfolio of performance and safety testing data. It combines application flexibility with broad spectrum efficacy, on hard surfaces, and in the face of organic challenge. These qualities make Rely+On™ Virkon® the disinfectant of choice for use in medical facilities, pathology and biosafety containment laboratories, treatment salons and residential homes.



Hygiene in the care environment

Superior Operator Safety Profile

Rely+On™ Virkon® has fewer handling and use constraints than many other disinfectant products and is not classified as harmful or a sensitizer in both powdered form and in-use dilutions, in accordance with EU legislation on the classification and labelling of chemical preparations.

Environmental Profile

The Rely+On™ Virkon® oxygen-based chemistry contains simple organic salts and organic acids and the active ingredient decomposes by a variety of routes within the environment, in soil and water, breaking down to form the naturally occurring substances, potassium salts and oxygen. The major organic components are classified as readily biodegradable according to OECD and EU tests.

Rely+On™ Virkon® is not classified as R53* and is not persistent in the environment, according to the standard European process for the classification and labelling of chemical preparations. Independent studies have shown that diluted Rely+On™ Virkon® should not, when used as directed, pose any threat to sewage treatment facilities.

Mode of Action

Rely+On™ Virkon® oxidizes key structures and compounds, such as proteins, leading to widespread, irreversible damage and subsequent deactivation/destruction of the microorganism.

There is no evidence to suggest that bacterial disease-causing organisms develop resistance towards Rely+On™ Virkon® as opposed to some other disinfectant types.

* may cause long term adverse effects in the aquatic environment.

Proven Broad Spectrum Efficacy

Independently proven highly effective against:

- over 100 strains of virus in 22 viral families
- over 400 strains of bacteria
- over 60 strains of fungi and yeast

using a wide variety of contact times, temperatures and organic challenge levels.



Laboratory disinfection

The table below summarises independent efficacy data of Rely+On™ Virkon® against important disease-causing pathogens.

Virucidal Efficacy

Organism/Disease	Strain	Dilution Rate	Organism/Disease	Strain	Dilution Rate
Adenovirus (H5)	Type 5 ATCC VR-5	1:100	Hepatitis C (BVDV) Final	ATCC CCL-222	1:100
Adenovirus	Type 5 (EN14476)	1:100	Hepatitis C (BVDV) Confirmatory	ATCC CCL-222	1:100
Bacteriophages	Strep. lactis bacteriophage 66	1:500	HIV	Type 1	1:100
	Bacteriophage T2 with E.coli	1:500 - 1:4000	Influenza A virus	ATCC VR-544	1:100
	Bacteriophage MS2 with E.coli	1:500 - 1:4000	Orthopox virus	-	1:100
	Bacteriophage OX174 with E.coli	1:500 - 1:4000	Poliovirus	Type 1 (Sc2ab)	1:100
Feline calicivirus (surrogate for Norwalk & norovirus)	ATCC VR-782	1:100	Poliovirus	Type 1 (EN14476)	1:100
Hepatitis A	Sattar	1:100	Respiratory syncytial virus	ATCC VR-26	1:100
Hepatitis B Final	DHRV	1:100	Rotavirus	Human Strain	1:250
Hepatitis B Confirmatory	DHBV	1:100			

Bactericidal Efficacy

Organism/Disease	Strain	Dilution Rate	Organism/Disease	Strain	Dilution Rate
Actinobacillus pleuropneumoniae	ATCC 43336	1:100	Ps. aeruginosa	ATCC 15442	1:100
Bacillus cereus (veg)	ATCC 14579	1:100	Ps. aeruginosa	CIP 103467	1:200
Bacillus subtilis (veg)	NCTC 10073	1:100	Ps. aeruginosa	CIP 422	1:100
Campylobacter jejuni	ATCC 24029	1:100	Ps. aeruginosa	NCTC 6749	1:200
Chlamydia psittaci	VR-125 (strain 6BC)	1:100	Ps. aeruginosa	PaH172/a	1:100
Clostridium perfringens (veg)	ATCC 13124	1:100	Proteus vulgaris	NCTC 6335	1:100
Coxiella burnetii	Nine mile (BISA 493)	1:100	Salmonella enteritidis	CVI - WVR - Leystad	1:200
Dermatophilus congolensis	ATCC 14637	1:100	Salmonella typhimurium	DT104	1:200
Escherichia coli 0157	ATCC 43885	1:100	Salmonella typhimurium	ATCC 23564	1:100
Escherichia coli	CIP 54.127	1:200	Salmonella typhimurium	SEFH6a	1:100
Escherichia coli	EcfHM4/a	1:100	Shigella sonnei	ATCC 25921	1:100
Escherichia coli	NCTC 8196	1:100	Staphylococcus aureus	ATCC 25922 (MRSA)	1:100
Enterococcus hirae	CIP 58.55	1:200	Staphylococcus aureus	ATCC 6528	1:100
Enterococcus hirae	EcfHM4/a	1:100	Staphylococcus aureus	NCTC 4163	1:100
Enterococcus faecium	ATCC10541	1:100	(MRSA 7 clinical isolates)		1:100
Legionella pneumophila	NCTC 1192	1:5000	Staphylococcus aureus	CIP 483	1:200
Listeria monocytogenes	ATCC 19117	1:100	Staphylococcus aureus	SaH173/a	1:100
Listeria monocytogenes	LMF106/a	1:100	Staphylococcus aureus	MRSA Swine origin	1:100
Klebsiella pneumoniae	ATCC 4352	1:100	Staphylococcus epidermidis	ATCC 12228	1:100
Pasteurella multocida	ATCC 12947	1:100	Streptococcus faecalis	NCTC 775	1:100
Prionus marabitis	ATCC 15442	1:100	Streptococcus pyogenes	ATCC 11229	1:100
Ps. aeruginosa	ATCC 15442	1:100	Streptococcus suis	CB194	1:150
Ps. aeruginosa	CIP 103467	1:200	Streptococcus suis	ATCC 43785	1:100

Fungicidal/Yeastcidal Efficacy

Organism/Disease	Strain	Dilution Rate	Organism/Disease	Strain	Dilution Rate
Aspergillus niger (spores)	AnFH8/a	1:33	Fusarium moniforme	ATCC 10062	1:50
Candida albicans	CaFH8/a	1:40	Saccharomyces cerevisiae	ScFH8/a	1:40
Candida albicans	Gbl 648	1:100	Trichophyton mentagrophytes	ATCC 9533	1:100
Candida albicans	LMFL 985	1:100			

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Applications

Medical Facilities

- Routine disinfection of hard surfaces, furniture, floors, walls and doors in hospital wards, clinics and laboratories.
- Broad spectrum disinfection and decontamination of hard surfaces in critical clinical facilities, such as operating theatres, intensive care units and accident and emergency departments.
- Body fluid spillage clear-up and decontamination.

Pathology and Biosafety Containment Laboratories

- Routine cleaning and disinfection of hard surfaces and equipment*, such as benches, floors, walls and doors, cabinets, centrifuges and pipette discard jars.

Treatment Salons

- Routine cleaning and disinfection of hard surfaces such as floors, walls and doors.

Residential Homes

- Routine disinfection of hard surfaces, equipment*, furniture, floors, walls and doors in treatment and communal areas, corridors and bathrooms.

* not for use for the disinfection of medical devices

Easy to Prepare

Readily soluble in tap water, Rely+On™ Virkon® dissolves into a pink solution, which activates within 5 minutes and remains stable for up to 5 days, as a 1:100 solution. Consult DuPont for advice on stability for any alternate strength solutions.

Unused or inactive solutions may be disposed of via the sink (leading to waste water treatment facilities and in accordance with local regulations).

Hard Surface & Equipment Cleaning & Disinfection

The level of disease causing organisms present after general cleaning can remain high enough to offer a serious disease challenge to patients and staff. Using a disinfectant proven to be effective against viruses, bacteria and fungi, such as Rely+On™ Virkon®, is essential.

Task	Dilution Rate	Application
Hard Surface Disinfection	1:100 (10 grams of Rely+On™ Virkon® to every litre of water)	Apply disinfectant solution using either a trigger spray bottle, cloth, sponge or floor mop.
Equipment Disinfection (not medical devices)	1:100 (10 grams of Rely+On™ Virkon® to every litre of water)	Suitable equipment can either be submerged and washed in disinfectant solution or sprayed and then wiped clean with a cloth or sponge. Rinse disinfected equipment with clean water after 10 minutes when materials compatibility is not known. Refer to the product instruction for Use Leaflet (UL) for further specific information.

Presentations

Rely+On™ Virkon® Powder

- 50 gm sachet – makes 5 litres of disinfectant
- 500 gm container – makes 50 litres of disinfectant
- 5 Kg drum – makes 500 litres of disinfectant

Rely+On™ Virkon® Tablets

- Convenient to store and easy to handle; simplifies accurate dosing of a disinfectant solution.
- 10 x 6 gm tablets – makes 5 litres of disinfectant
- 50 x 6 gm tablets – makes 25 litres of disinfectant



Certifications



Antec International Limited, Sudbury, Suffolk CO10 2XD, United Kingdom

24 January 2020

Rely-On™ Virkon™ highly effective against Human Coronavirus

As you are aware, Human Coronavirus continues its rapid spread across Europe, China and Southeast Asia, with suspected cases in the UK and Canada. Many authorities have announced screening measures for passengers from China, including the major airport hubs of Dubai and Abu Dhabi.

With no vaccine or other medical treatment currently approved, we are pleased to advise that Rely-On™ Virkon™ has already received independent evaluation against the virus.

Rely-On™ Virkon™ met the performance requirements specified in the study protocol. The results indicate complete inactivation of Human Coronavirus under these test conditions, as required by the U.S. EPA. Tests were carried out and confirmed by independent company ATS labs in 2015.

Rely-On™ Virkon™ achieved complete inactivation of the Human Coronavirus at a 1:100 dilution rate with a 10 minute contact time.

These test results provide independently proven data on the ability of Rely-On™ Virkon™ to effectively and completely kill the Human Coronavirus rapidly.

Yours sincerely

Anneliese Bischof
Business Director Disinfection

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LANXESS S.A.S.

Rely-On™ Virkon™ Broad spectrum Disinfectant for Human Health

TO WHOM IT MAY CONCERN

LANXESS Rely-On™ Virkon™ is a scientifically formulated disinfectant containing the active ingredient pentapotassium bis(peroxymonosulphate) bis(sulphate) (CAS No 70693-62-8). This formulation has been developed specifically for use in the Human Health market sector. It is manufactured at Antec Int. Ltd. (United Kingdom), affiliated to Lanxess Deutschland GmbH, or at the Talke facility in Spain.

Rely-On™ Virkon™ has been tested and proven effective against disease-causing pathogens of specific concern to human health. It is used for the disinfection and decontamination of hard surfaces, floors, walls, doors and door handles, furniture, cabinets, centrifuges and pipette discard jars etc. in:

Medical Facilities (Hospitals and Doctors Surgeries)
Pathology and Biosafety Containment Laboratories
Treatment Salons
Residential Homes
Public Areas

With regard to the current global Coronavirus situation, independent tests have proven that Rely-On™ Virkon™ inactivates a closely related surrogate of the currently spreading coronavirus strain. From these tests it can be concluded that Rely-On™ Virkon™ would also be effective against SARS-CoV-2 which is causing the current COVID-19 epidemic at an in-use dilution rate of 1:100.

For further information on the effectiveness and applications for Rely-On™ Virkon™ disinfectant products please consult the following channels:

<https://coronavirus.lanxess.com/>
relyondisinfection@lanxess.com
www.relyondisinfection.com
www.virkon.com
www.lanxess.com

Yours sincerely,
LANXESS S.A.S.

Laura Puig
Head of Regulatory Affairs
BL ACD Formulations, MPP

March 16, 2020

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APE : 4675Z



Epsikon SaniCov™

Generic of Virkon chemical, employed by DuPont in sanitizing against Sars-Cov2

COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature : Mixture

Components

Chemical Name	CAS-No.	Concentration
Pentapotassium bis(peroxymonosulphate) bis(sulphate)	70693-62-8	40 - 55%
Sodium C10-13-alkylbenzenesulfonate	68411-30-3	10 - 12%
Malic acid	6915-15-7	7 - 10%
Sulphamidic acid	5329-14-6	4 - 6%
Sodium toluenesulphonate	12068-03-0	1 - 5%
Dipotassium peroxodisulphate	7727-21-1	<3%
Dipentene	138-86-3	<0.25%



Recommended Concentration of Epsikon SaniCov™



Contact:9328927035

Safe concentration of disinfectant in walkthrough spray tunnels and their scientific design

Joint Press Release: CSIR-NCL Pune and ICT Mumbai

CSIR–National Chemical Laboratory (CSIR-NCL), Pune evaluated various concentrations of sodium hypochlorite to find effective chemical disinfectants for the mist sanitization system.

Press Publications

The use of mist-based sanitization is expected to provide safeguards to frontline healthcare professionals, including paramedic staff, police, and employees providing essential services. These people are more likely to get the infection and unknowingly spread arising from various sources. A lot of advisories have appeared against the use of such tunnels from various agencies, which does not have any scientific basis.

Efficacy of sodium hypochlorite, also known as hypo or bleach, ranging from 0.02% to 0.5% weight concentration was studied on personnel walking through mist tunnel unit, besides antibacterial activity against standard microorganisms before and after exposure in the walkthrough. Results indicated that 0.02% to 0.05% weight concentration did not show an adverse effect on normal skin flora and yet destroyed the standard microbes. Thus, we recommend using 0.02% -0.05 wt.% sodium hypochlorite solution (200 to 500 ppm) for external body surface sanitization of personnel walk through the mist tunnel by following standard safety precautions.

For optimal effects, CSIR-NCL further recommends different concentrations of hypo depending on the nature of exposure to personnel. Hypo solution with 0.05% weight concentration is suggested for those exposed to the large population such as health workers, police, municipal



TH CSIR lab defends sanitisation 15

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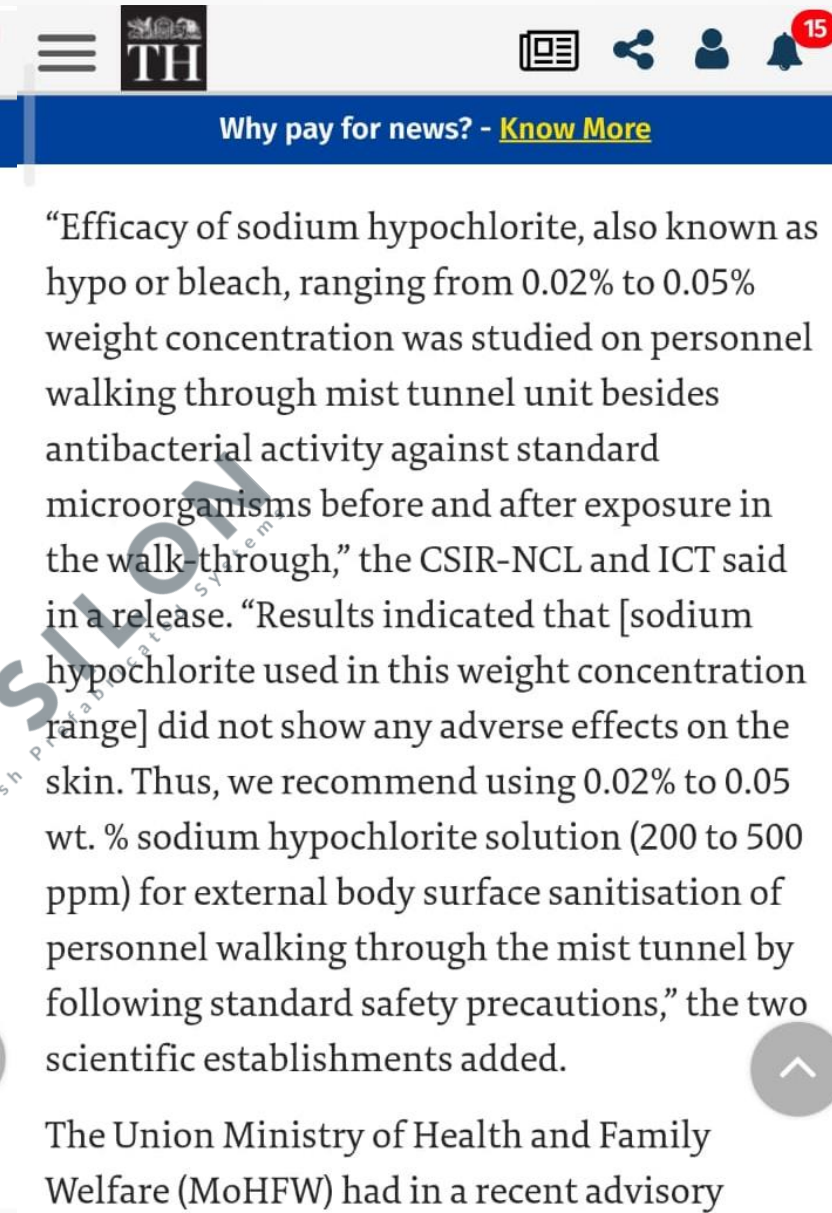
CSIR lab defends sanitisation tunnel after ministry's advisory

Shoumojit Banerjee

PUNE, APRIL 23, 2020 21:10 IST
UPDATED: APRIL 23, 2020 21:10 IST

Advisories advocating against use of sanitisation tunnels lack scientific basis, say CSIR-NCL, ICT

In the wake of several advisories advocating against the use of sanitisation tunnels as part of efforts to contain the spread of the novel **coronavirus**, the Pune-based CSIR-National Chemical Laboratory (CSIR-NCL) and the Mumbai-based Institute of Chemical Technology (ICT) issued a joint statement on Thursday asserting that the advisories “did not have any scientific basis”.



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“Efficacy of sodium hypochlorite, also known as hypo or bleach, ranging from 0.02% to 0.05% weight concentration was studied on personnel walking through mist tunnel unit besides antibacterial activity against standard microorganisms before and after exposure in the walk-through,” the CSIR-NCL and ICT said in a release. “Results indicated that [sodium hypochlorite used in this weight concentration range] did not show any adverse effects on the skin. Thus, we recommend using 0.02% to 0.05 wt. % sodium hypochlorite solution (200 to 500 ppm) for external body surface sanitisation of personnel walking through the mist tunnel by following standard safety precautions,” the two scientific establishments added.

The Union Ministry of Health and Family Welfare (MoHFW) had in a recent advisory

Contact:9328927035

Preventive measures

Steps to regain the control on the epidemic situation in our country. We must stand firm and cautious. This deadly virus can be controlled by the right approach towards handling it.

Mass sanitisation is no replacement to safe personal hygiene practises

- 1- clean your hands often. Use soap and water, or an alcohol-based hand rub
- 2- maintain a safe distance from anyone who is coughing or sneezing .
- 3- do not touch your eyes, nose or mouth
- 4- cover your nose and mouth with your bent elbow or a tissue when you cough or sneeze.
- 5- stay home if you feel unwell
- 6- if you have a fever, a cough, and difficulty breathing, seek medical attention. Call in advance
- 7- follow the directions of your local health authority

Contact:9328927035

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EPSILON

Savvish Prefabricated Systems

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