

VIRSUS®**1 – PRODUCT AND COMPANY INFORMATION**

PRODUCT USE: Surface sanitizer for use in animal housing.
Not intended for domestic applications.
Not to be used in presence of animals.

SUPPLIER: Deosan Manufacturing Ltd
20 Seddon Street
WAHAROA
NEW ZEALAND

Telephone: 0800 336 726 (0800 DEOSAN) / +64 7 888 5628

Email: info@deosan.co.nz

24 Hour Emergency Contact: 0800 243 622

International Emergency Number: +64 4 917 9888

New Zealand Poison Centre: 0800 POISON (0800 764 766)

NZ Emergency Services: 111

2 – HAZARDS IDENTIFICATION

HAZARDOUS SUBSTANCE. DANGEROUS GOODS.

Classified as hazardous according to criteria in the New Zealand Hazardous Substances and New Organisms legislation and GHS 7th Edition.

HAZARD LABELLING: DANGER

GHS CLASSIFICATION

- Oxidising Solids Category 3
- Eye Irritation Category 2
- Serious Eye Damage Category 1
- Specific Target Organ toxicity – single exposure category 3, respiratory tract irritation
- Hazardous to the Aquatic Environment chronic category 4

HSNO Classification: 5.1.1C, 6.3B, 6.4A, 8.3A

**GHS HAZARD STATEMENTS**

Physical Hazards: Mildly corrosive solid

Health Hazards: May be fatal if swallowed.
Causes serious eye and skin damage.

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Environmental Hazards: Toxic to aquatic life. May cause long-lasting harmful effects.
Harmful to terrestrial vertebrates.

PREVENTION

- Keep out of reach of children.
- Read label and safety data sheet before use.
- Do not breathe vapours.
- Wash hands thoroughly after handling.
- Do not eat, drink or smoke when using this product.
- Use only outdoors or in a well-ventilated area.
- Avoid release to the environment.
- Wear protective gloves/protective clothing/eye protection/face protection.

RESPONSE

- If medical advice is needed, have product container or label at hand.
- IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth. Do NOT induce vomiting.
- IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash with plenty of soap and water.
- IF INHALED: Remove 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 if unwell.
- Wash contaminated clothing before reuse.
- Absorb spillage to prevent material damage.

STORAGE

- Store only in original container.
- Store locked up.

DISPOSAL

Dispose of contents and packaging in accordance with relevant legislation. See Section 13 of this SDS Document for more information.

3 – COMPOSITION / INFORMATION ON INGREDIENTS**Hazardous Ingredients**

Component	CAS- No.	Concentration [%]
Monopersulphate Compound	10058-23-8	<50.0
Citric Acid	77-92-9	<50.0
EDTA Acid	60-00-4	<10.0
Sodium Alkyl Benzene Sulphonate	68081-81-2	<5.0
Alcohol Ethoxylate	84133-50-6	<2.0

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SYNONYMS: None.

4 - FIRST AID MEASURES

IN AN EMERGENCY CALL AN AMBULANCE (111).

Primary routes of exposure by inhalation of vapour and contact with skin or eyes.

MAIN SYMPTOMS CAUSED BY EXPOSURE

Exposure may cause severe chemical burns and pain to skin, eyes and the gastrointestinal tract. Cough, sore throat and burning sensation may occur if inhaled.

SWALLOWED

Call an ambulance immediately. Urgent hospital treatment is likely to be needed.

If swallowed do NOT induce vomiting.

Give water to rinse out mouth, then spit out rinse water. Provide water or milk slowly and as much as casualty can comfortably drink.

Transport to hospital or doctor without delay with a copy of this safety data sheet.

EYE CONTACT

Immediately hold eyelids apart and flush the eye continuously with running water.

Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.

Continue flushing for at least 15 minutes, or until advised to stop by the Poison Centre or a doctor. Transport to hospital or doctor without delay with a copy of this safety data sheet.

Removal of contact lenses after an eye injury should be undertaken by skilled personnel.

SKIN CONTACT

Immediately brush off any solid material from the skin using dry cloth materials. Flush body and clothes with large amounts of water, using safety shower if available. Quickly remove all contaminated clothing, including footwear while in the shower.

Wash skin and hair with running water. Continue flushing with water until advised to stop by the Poison Centre or doctor.

Transport to hospital or doctor for treatment if necessary, with a copy of this safety data sheet.

INHALATION

If fumes, aerosols or combustion products are inhaled remove from contaminated area. Lay patient down. Keep warm and rested.

Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures.

Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary.

Transport to hospital, or doctor if necessary, with a copy of this safety data sheet.

NOTES TO PHYSICIAN

Treat symptomatically based on individual reactions of patient and judgement of doctor.

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5 – FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA

In case of fire, use appropriate extinguishing media most suitable for surrounding fire conditions: water, water spray, dry powder, foam, carbon dioxide (CO₂).

FIRE FIGHTING

Alert Fire Brigade and tell them location and nature of hazard. Clear fire area of all non-emergency personnel.

Prevent, by any means available, spillage from entering drains or water course. Use firefighting procedures suitable for surrounding area.

Equipment should be thoroughly decontaminated after use.

SPECIFIC HAZARDS

Non-combustible. Will not self-ignite or explode.

Not considered a significant fire risk, however containers may melt and release product.

PERSONAL PROTECTIVE EQUIPMENT

Fire-fighters should wear full protective clothing suitable for chemical hazards with self-contained breathing apparatus. The substance must be contained and prevented from entering drains and water courses in all circumstances.

HAZCHEM CODE

2X.

6 – ACCIDENTAL RELEASE MEASURES

Only fully trained personnel should be involved in handling chemicals. Personal Protective Equipment advice is contained in Section 8 of this SDS.

Wear protective gloves, clothing and eye/face protection.

Keep unnecessary people away from the hazardous area.

MINOR SPILLS

Clean up all spills immediately.

Clear area of all personnel not involved in the clean-up. Avoid contact with skin and eyes.

Wear full protective equipment. Dike spillage area to prevent runoff and contamination of water sources; Clean up by absorbing with sand or soil or diluting with water and then remove contaminants to a chemical disposal area.

MAJOR SPILLS

Clear area of all personnel not involved in the clean-up. Wear full body protective clothing with breathing apparatus.

If possible, dike spillage area to prevent runoff and contamination of water sources. Alert Fire Brigade and tell them location and nature of hazard. An exothermic reaction will occur on exposure to water.

Contain spilled material with sand, earth, vermiculite or another non-combustible material. Prevent, by any means available, spillage from entering drains or water courses.

Neutralise/decontaminate residue.

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Collect solid residues and seal in labelled drums for disposal. Wash area and prevent runoff into drains.

After clean-up operations, decontaminate and launder all protective clothing and equipment before storing and re-using.

If significant contamination of drains or waterways occurs, advise emergency services.

7 – HANDLING AND STORAGE

PROCEDURE FOR HANDLING

Operators should be trained in procedures for safe use of this material. Contact lenses should not be worn when working with this chemical.

Avoid all personal contact. Implement controls to reduce risk of exposure, such as closed systems and isolated operations.

Wear chemical resistant protective clothing that completely covers skin. Use appropriate personal protective equipment. See section 8 of the SDS. Use in a well-ventilated area.

WARNING: To avoid violent exothermic reaction, ALWAYS add chemical to water; NEVER add water to chemical.

Avoid contact with incompatible materials. When handling, DO NOT eat, drink or smoke. Keep containers securely sealed when not in use. Avoid physical damage to containers.

Use good occupational work practice. Always wash hands with soap and water after handling. Work clothes should be laundered separately. Launder contaminated clothing before re-use.

SUITABLE PACKAGING

The UN Packaging specification number as well as the UN packaging Logo is to be printed on the containers. Store product in original packaging.

Corrosive resistant Plastic (HDPE) drum

Check all packaging is clearly labelled and free from leaks.

STORAGE REQUIREMENTS

Store locked up.

Store in original containers.

Protect containers against physical damage and check regularly for leaks.

Keep containers securely sealed to protect from moisture contamination.

Store in a cool, dry, well-ventilated area.

STORAGE INCOMPATIBILITY

Store away from acids.

Store away from foodstuff containers.

8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE CONTROLS

No specific exposure guidelines are available.

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ENGINEERING CONTROLS

No specific exposure controls are needed.

VENTILATION SYSTEM

No specific ventilation systems are required.

PERSONAL PROTECTION EQUIPMENT (PPE)

When handling product at all times wear:

- PVC protective gloves
- Safety Glasses/Goggles/Face Shield
- Chemical resistant waterproof boots
- Chemical resistant apron or overalls

PERSONAL RESPIRATORS

Not required

SKIN PROTECTION

Wear impervious protective clothing, including chemical resistant boots, gloves, apron or overalls as appropriate to prevent skin contact. Refer to AS/NZS 2161.1:2016 Occupational Protective Gloves – Selection, use and maintenance; AS/NZS 2210.1:2010 for Safety footwear; AS/NZS 4501.1:2008 Occupational protective clothing – Guidelines on the selection, use, care and maintenance of protective clothing.

Ensure ready access to an emergency shower.

EYE PROTECTION

Use approved chemical safety goggles and a full-face shield. Refer to Personal eye protection Part 1: Eye and face protectors for occupational applications, Australian/New Zealand Standard: AS/NZS 1337.1:2010. Ensure that there is ready access to eye wash unit.

9 – PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE

Pink granular powder.

PHYSICAL PROPERTIES

PROPERTY	VALUE
State:	Solid
Odour:	Chemical
Molecular Weight:	Not available
Melting Range (°C):	Not applicable
Boiling Range (°C):	Not applicable
Solubility in water (g/L, 20°C):	Completely to >50%
pH:	2.1 – 2.4 @ 1% aq.
Specific Gravity (water=1):	Not applicable
Bulk Density (kg/m ³):	~1000
Volatile Component (%vol, 21°C):	Not available

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Relative Vapor Density (air=1):	Not applicable
Vapour Pressure (hPa, 1175°C):	Not available
Autoignition Temp (°C):	Not applicable
Flash Point (°C):	Not applicable
Lower Explosive Limit (%):	Not applicable
Upper Explosive Limit (%):	Not applicable
Decomposition Temp (°C):	Not available
Viscosity (cps):	Not applicable
Evaporation Rate:	Not applicable

10 – CHEMICAL STABILITY AND REACTIVITY**CHEMICAL STABILITY**

Stable under normal conditions of use, storage and temperature.

CONDITIONS TO AVOID

Excessive heat, direct sunlight, moisture, high temperatures.

INCOMPATIBLE MATERIALS

Alkalis.

HAZARDOUS DECOMPOSITION PRODUCTS

May produce toxic and corrosive fumes.

HAZARDOUS REACTIONS

Violent reaction on contact with Alkalis.

11 – TOXICOLOGICAL INFORMATION**SWALLOWED**

If swallowed will cause irritation of digestive tract.

EYE

Contact will cause moderate to severe eye irritation.

SKIN

Repeated or prolonged contact may cause skin irritation.

INHALED

Inhalation of dust may irritate the respiratory system

CHRONIC HEALTH EFFECTS

Substance accumulation in the human body may occur and may cause concern following repeated or long- term occupational exposure.

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Repeated or prolonged exposure to corrosives may result in the erosion of teeth, inflammatory and ulcerative changes in the mouth and necrosis (rarely) of the jaw. Bronchial irritation, with cough, and frequent attacks of bronchial pneumonia may ensue. Gastrointestinal disturbances may also occur.

Chronic exposures may result in dermatitis and/or conjunctivitis.

TOXICITY AND IRRITATION DATA TOXICITY

Acute Oral Toxicity, Rat, LD50: Not available

Acute Dermal Toxicity, LD50: Not available.

Acute Inhalation Toxicity, LC50: Not available.

IRRITATION

Eye: Corrosive to eyes.

Skin: Corrosive to skin.

Carcinogenic effects: The substance is not classified by IARC as carcinogenic to humans.

Mutagenic effects: No data available.

Reproductive or developmental effects: No data available.

Aspiration hazard: No data available.

Specific target organ toxicity: No data available.

Sensitisation (respiratory/contact): No data available.

12 – ECOLOGICAL INFORMATION

ECOTOXICITY

Toxic to aquatic life. May cause long-lasting harmful effects.

Harmful to terrestrial vertebrates.

Prevent spillage into waterways.

ECOTOXICITY DATA

Fish, 96hr LC50: Not available

Persistence and Degradability: Not available

Mobility: Soluble in water.

Bioaccumulation: The substance has no known potential for bioaccumulation.

BOD or COD: Not available

PRODUCTS OF DEGRADATION: Not available

13 – DISPOSAL INFORMATION

PRODUCT

Return unwanted product to the manufacturer for disposal or contact the Regional Council for local chemical disposal area details.

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Treatment in a biological wastewater treatment system with prior approval and arrangement is also permissible providing that the substance is rendered non-hazardous and does not pose any adverse effects to human health or the environment.

Alternatively consult an approved Waste Management company for disposal options.

PACKAGING

NZ: Triple-rinse empty containers. Contact AgRecovery to arrange for pick-up or drop-off at a collection depot.

Overseas: Triple-rinse empty containers. Dispose of containers in accordance with guidance/regulations from relevant local authorities.

Observe all label safeguards until containers are cleaned and destroyed.

Where possible retain label warnings and SDS and observe all notices pertaining to the product.

14 – TRANSPORT INFORMATION

UN Number:	3260
Proper Shipping Name:	Corrosive Solid, Acidic, Inorganic, NOS
DG Class:	8
Packing Group:	II
Label required:	CORROSIVE
Hazchem code:	2X
Marine Pollutant:	No
EMS Number:	N/A



Road and Rail Transport: Do not Ship with class 8 Acids.
Do not ship with foodstuffs.

15 – REGULATORY INFORMATION

REGULATIONS

Classified as hazardous according to the criteria of the New Zealand Hazardous Substances and New Organisms Act.

This product has been assigned to the following Group Standard by Deosan Manufacturing Ltd:
HSR002526: Cleaning Products (corrosive) Group Standard 2020.

Location compliance certification, certified handler and tracking regulations do not apply.

VIRSUS[®]**SECTION 16 – OTHER INFORMATION****INTERPRETATION AND ABBREVIATIONS**

EPA - The Environmental Protection Authority of New Zealand

HSNO - Hazardous Substances and New Organisms Act 1996

MPI - Ministry for Primary Industries

EINECS - European Inventory of Existing Commercial Chemical Substances.

ENCS - Japanese Existing and New Chemical substances.

ERPG - Emergency Response Planning Guidelines.

GHS - Globally Harmonized System of Classification and Labelling of Chemicals.

IARC - International Agency for Research on Cancer.

SOURCES OF KEY DATA USED TO COMPILE THE DATASHEET:

Manufacturer's SDS, NZ EPA, CCID

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