

TRIODEX[®]**1 – PRODUCT AND COMPANY INFORMATION****PRODUCT USE:** Antimicrobial skin conditioner for mastitis prevention in dairy cows.**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 (CHEMCALL)**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: WARNING

Ecotoxic Liquid

GHS CLASSIFICATION

- **Skin Irritation Category 2**
- **Eye Irritation Category 2**
- **Skin Sensitisation Category 1**
- **Specific Organ Toxicity – Repeated Exposure Category 2**
- **Hazardous to the Aquatic Environment Chronic Category 3**

**HSNO Classification:** 6.3A, 6.4A, 6.5B, 6.9B, 9.1C**GHS HAZARD STATEMENTS****Physical Hazards:** None**Health Hazards:** May cause skin and/or eye irritation.
Inhalation may cause organ damage.**Environmental Hazards:** Toxic to aquatic life. May cause long-lasting harmful effects.

TRIODEX®**PREVENTION**

- Keep out of reach of children.
- Read label and safety data sheet before use.
- Wear protective gloves, protective clothing, eye protection, face protection
- Wash hands thoroughly after handling.
- Do not eat, drink or smoke when using this product.
- Avoid release to the environment.

RESPONSE

- If medical advice is needed, have product container or label at hand.
- IF SWALLOWED: Do not induce vomiting. Seek medical attention if you feel unwell.
- IF ON SKIN (or hair): Contact with skin may cause irritation in some people. Remove all contaminated clothing. Rinse skin with water/shower until no more irritation.
- IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
- IF IN EYES: Contact with eyes may cause irritation. Immediately flush eyes with flowing water including under the eyelids for at several minutes. If irritation persists, seek medical assistance.
- Immediately call a POISON CENTER or doctor/physician if unwell.
- Wash contaminated clothing before reuse.

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 [%]
Polyvinylpyrrolidone Iodine	25655-41-8	<15
Nonionic Surfactants	127087-87-0	<5.0
Potassium Iodate	7758-05-6	<1

SYNONYMS: None.

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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 allergic reactions to skin in some people.

Inhalation may cause difficulty in breathing.

SWALLOWED

Rinse mouth and drink large quantity of water. Do NOT induce vomiting.

Call a POISON CENTER or doctor/physician if you feel unwell.

EYE CONTACT

Will cause irritation or discomfort.

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.

If eye irritation persists seek medical advice/attention. Continue rinsing until advised to stop by the Poison Centre or a doctor.

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

SKIN CONTACT

If irritation or rash occurs, remove contaminated clothing and thoroughly wash skin and hair with running water.

Seek medical attention if irritation persists.

INHALATION

May cause damage to organs through prolonged or repeated exposure. Remove to fresh air and keep at rest in a position comfortable for breathing.

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

NOTES TO PHYSICIAN

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

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.

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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

None.

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

Not considered a 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

None

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.

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

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.

TRIODEX®**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.

WARNING: Keep out of reach of children.

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.

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.

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 INCOMPATIBILITY

None.

STORAGE REQUIREMENTS

Store locked up.

Store in original containers.

Keep containers securely sealed to protect from moisture contamination. Store in a cool, dry, well-ventilated area.

Store away from incompatible materials and foodstuff containers. Protect containers against physical damage and check regularly for leaks.

8 – EXPOSURE CONTROLS / PERSONAL PROTECTION**EXPOSURE CONTROLS**

No exposure limits set by WorkSafe New Zealand.

ENGINEERING CONTROLS

No specific engineering controls are needed.

VENTILATION SYSTEM

No specific ventilation systems are required.

PERSONAL PROTECTION EQUIPMENT (PPE)

When handling product always wear PVC protective gloves and eye protection. Protective clothing, Chemical/waterproof boots and chemical resistant apron also recommended.

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PERSONAL RESPIRATORS

Not required

SKIN PROTECTION

People with an allergy to iodine should 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.

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

Dark brown viscous liquid.

PHYSICAL PROPERTIES

PROPERTY	VALUE
State:	Liquid
Odour:	Iodine
Molecular Weight:	Not available
Melting Range (°C):	-18°C
Boiling Range (°C):	~100°C
Solubility in water (g/L, 20°C):	Completely at any amount
pH:	3.5 – 4.5
Specific Gravity (g/ml):	1.09 – 1.11
Bulk Density (kg/m ³):	Not applicable
Volatile Component (%vol, 21°C):	Not available
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 available
Evaporation Rate:	Not available

TRIODEX®**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

None.

HAZARDOUS DECOMPOSITION PRODUCTS

None.

HAZARDOUS REACTIONS

None.

11 – TOXICOLOGICAL INFORMATION**SWALLOWED**

Virtually nontoxic after a single ingestion. May cause nausea.

EYE

Causes serious eye irritation and may cause eye damage if not washed out.

SKIN

Generally non-hazardous. Allergic rash may develop in some people.

INHALED

May cause damage to organs through prolonged or repeated exposure.

CHRONIC HEALTH EFFECTS

None known.

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: Mildly irritant.

Skin: Non-hazardous.

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.

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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.

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.

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: N/A

Proper Shipping Name: **Not Regulated**

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DG Class:	N/A
Packing Group:	N/A
Label required:	N/A
Hazchem code:	N/A
Marine Pollutant:	No
EMS Number:	N/A
Road and Rail Transport:	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:
Veterinary Medicines (Non-dispersive Open System Application) Group Standard 2020

Approval Number: HSR100759 (Previously HSR002310)

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

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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DISCLAIMER: *The information contained in this safety data sheet was obtained from current and reliable sources. This data is supplied without warranty, expressed or implied, regarding its correctness and accuracy. It is the user's responsibility to determine safe conditions for use of this product and to assume liability for loss, injury, damage or expense resulting from improper use of this product.*

Deosan recommends that if this sheet is kept in hard copy that the user check www.deosan.co.nz/safety-data-sheets/ monthly to ensure it is still current.