ZINC CHELATE

Section 1. Identification of the material and the supplier

Product:	**Zinc Chelate**
Product Use:	Liquid trace mineral supplement for dairy cows.
Restriction of Use:	Refer to Section 15
New Zealand Supplier:	**Deosan Manufacturing Ltd**
Address:	20 Seddon Street Waharoa New Zealand
Email:	info@deosan.co.nz
Telephone:	0800 336 726 (0800 DEOSAN) / +64 7 888 5628
24 Hour Emergency Contact:	**0800 243 622 (CHEMCALL)**
Emergency No:	**0800 764 766 (National Poison Centre)**
Date of SDS Preparation:	8 April 2025

Section 2. Hazards Identification

This substance is NOT hazardous according to the EPA Hazardous Substances (Classification) Notice 2020

Section 3. Composition / Information on Hazardous Ingredients

Ingredients	CAS NUMBER.	Wt%
Zinc Chelate	14025-21-9	<35
Non Hazardous ingredients		To 100%

Section 4. First Aid Measures

Routes of Exposure:

If in Eyes	Rinse cautiously with water for 15 minutes. If eye irritation persists: Get medical advice.
If on Skin	Wash with plenty of soap and water. If skin irritation occurs: get medical advice/attention.
If Swallowed	Do not induce vomiting. Wash out mouth thoroughly with water. Drink large amounts of water. Never give anything to the mouth of an unconscious person. Seek medical attention if needed.
If Inhaled	Remove person to fresh air. Remove contaminated clothing and loosen remaining clothing. Allow person to assume most comfortable position and keep warm. Keep at rest until fully recovered. Apply artificial respiration if not breathing. Get medical advice if breathing becomes difficult.

Most important symptoms and effects, both acute and delayed

Symptoms: None known.

Section 5. Fire Fighting Measures

Hazard Type	Non Flammable
Hazards from combustion products	None known.
Suitable 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).
Precautions for firefighters and special protective clothing	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. Alert Fire Brigade and tell them location and nature of hazard. Clear fire area of all non-emergency personnel. Equipment should be thoroughly decontaminated after use.
HAZCHEM CODE	**None Allocated**

Section 6. Accidental Release Measures

For emergency responders:
Wear protective equipment detailed in Section 8. Keep unnecessary people away from the hazardous area.

Environmental precautions:
Prevent, by any means available, spillage from entering drains or water course.

Methods and material for containment and cleaning up:
Stop leak if safe to do so. Contain spill with sand, earth or vermiculite. Collect recoverable product into labelled containers for recycling.
Wash area and prevent runoff into drains. If contamination of drains or waterways occurs, advise emergency services. Dispose of as per Section 13.

Section 7. Handling and Storage

Precautions for Handling:

- Read carefully and follow all instructions.
- Wear protective clothing as detailed in SDS Section 8.
- Operators should be trained in procedures for safe use of this material.
- When handling, DO NOT eat, drink, or smoke.
- Keep containers securely sealed when not in use.
- Avoid physical damage to containers.

Precautions for Storage:

- Store away from incompatible materials listed in Section 10.
- Store in original containers.
- Keep containers securely sealed to protect from moisture contamination.
- Store in a cool, dry, well-ventilated area.
- Store away from foodstuff containers.
- Protect containers against physical damage and check regularly for leaks.
- Suitable Packaging: Corrosive resistant Plastic (HDPE) drum

Section 8 Exposure Controls / Personal Protection

WORKPLACE EXPOSURE STANDARDS (provided for guidance only)

	TWA		STEL	
Substance	**ppm**	**mg/m³**	**ppm**	**mg/m³**

None of the components have assigned exposure limits.

Workplace Exposure Standard – Time Weighted Average (WES-TWA). The time-weighted average exposure standard designed to protect the worker from the effects of long-term exposure. Workplace Exposure Standard – Short-Term Exposure Limit (WESSTEL). The 15-minute average exposure standard. Applies to any 15- Minute period in the working day and is designed to protect the worker against adverse effects of irritation, chronic or irreversible tissue change, or narcosis that may increase the likelihood of accidents. The WES-STEL is not an alternative to the WES-TWA; both the short-term and time-weighted average exposures apply. Workplace Exposure Standards and Biological Exposure Indices Feb 2025 15TH EDITION.

Engineering Controls

No specific engineering controls are needed.

Personal Protection Equipment

Eyes	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.
Skin	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.
Respiratory	Not required.

Section 9 Physical and Chemical Properties

Appearance	Liquid
Colour	Colourless
Odour	Odourless
Odour Threshold	Not available
pH	4.5 – 5.5
Boiling Point	~100°C
Melting Point	~0°C
Freezing Point	Not available
Flash Point	Not available
Flammability	Non-flammable
Upper and Lower Explosive Limits	Not available
Vapour Pressure	Not available
Vapour Density	Not available
Specific Gravity	1.16 – 1.2 g/ml
Water Solubility	Miscible
Partition Coefficient:	Not available
Auto-ignition Temperature	Not available
Decomposition Temperature	Not available
Kinematic Viscosity	Not available
Particle Characteristics	Not available

Section 10. Stability and Reactivity

Stability of Substance	Product is stable under normal conditions of use, storage, and temperature.
Possibility of hazardous reactions	None known.

Conditions to Avoid	Avoid excessive heat, direct sunlight, moisture, high temperatures. Keep containers dry and tightly closed to avoid moisture absorption and contamination.
Incompatible Materials	None known.
Hazardous Decomposition Products	None known.

Section 11 Toxicological Information

Acute Effects:

Swallowed	This product is not classified as acutely toxic.
Dermal	This product is not classified as acutely toxic.
Inhalation	This product is not classified as acutely toxic.
Eye	This product is not classified an eye irritant/corrosive.
Skin	This product is not classified as a skin irritant/corrosive.

Chronic Effects:

Carcinogenicity	This product is not classified as carcinogenic.
Reproductive Toxicity	This product is not classified as toxic for reproduction.
Germ Cell Mutagenicity	This product is not classified as mutagenic.
Aspiration	This product is not classified as Asp Tox.
STOT/SE	This product is not classified as STOT SE.
STOT/RE	This product is not classified as STOT RE.

Section 12. Ecotoxicological Information

The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

Product:	
Persistence and degradability	No data available
Bioaccumulation	No data available
Mobility	Completely soluble.
Other adverse effects	No data available

Section 13. Disposal Considerations

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.

AGRECOVERY

Precautions or methods to avoid: None known.

Section 14 Transport Information

This product is NOT classified as a Dangerous Good for transport in NZ ; NZS 5433:2020 and SNZ HB 5433:2021

Section 15 Regulatory Information

This substance is NOT classified hazardous according to the EPA Hazardous Substances (Classification) Notice 2020

Section 16 Other Information

Glossary

Cat	Category
EC_{50}	Median effective concentration.
EEL	Environmental Exposure Limit.
EPA	Environmental Protection Authority
HSNO	Hazardous Substances and New Organisms.
HSW	Health and Safety at Work.
LC_{50}	Lethal concentration that will kill 50% of the test organisms inhaling or ingesting it.
LD_{50}	Lethal dose to kill 50% of test animals/organisms.
LEL	Lower explosive level.
OSHA	American Occupational Safety and Health Administration.
TEL	Tolerable Exposure Limit.
TLV	Threshold Limit Value-an exposure limit set by responsible authority.
UEL	Upper Explosive Level
WES	Workplace Exposure Limit

References:

1. EPA Hazardous Substances (Safety Data Sheets) Notice 2017
2. Workplace Exposure Standards and Biological Exposure Indices Feb 2025 15th edition.
3. Assigning a hazardous substance to a HSNO Approval (Aug 2013).
4. Transport of Dangerous goods on land NZS 5433:2020
5. HSW (Hazardous Substances) Regulations 2017

Disclaimer

This document has been prepared by TCC (NZ) Ltd and serves as the suppliers Safety Data Sheet ('SDS'). It is based on information concerning the product which has been provided to TCC (NZ) Ltd or obtained from third party sources and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. Further clarification regarding any aspect of the product should be obtained directly from the manufacturer. While TCC (NZ) have taken all due care to include accurate and up-to-date information in this SDS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, TCC (NZ) Ltd accept no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this SDS

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Please contact the New Zealand distributor, if further information is required.

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