

SAFETY DATA SHEET

Section 1. Identification of the material and the supplier

Product: Van Iperen Oligo Manganese-EDTA 13%
 Product No:
 Product Use: Fertiliser
 Restrictions of Use: Refer to Section 15

New Zealand Supplier: Horticulture Ltd
 Address: 10 Firth Street
 Drury, 2113

Telephone: +64 9 294 8453
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New Zealand: **0800 764 766 (National Poison Centre)**

Date of SDS Preparation: 4 January 2024

Section 2. Hazards Identification

Classified as NOT hazardous according to Regulation (EC) No. 1272/2008 [CLP] which meets New Zealand jurisdiction criteria as per EPA Hazardous Substances (Safety Data Sheets) Notice 2017.

Section 3. Composition / Information on Ingredients

Ingredients	Wt%	CAS NUMBER.
Disodium; 2-[2-(bis(carboxylatomethyl)amino)ethyl-(carboxylatomethyl)amino]acetate; manganese(+2) cation	To 100%	15375-84-5

Section 4. First Aid Measures

Routes of Exposure:

If in Eyes: Rinse cautiously with water for several minutes. If eye irritation persists: Get medical advice/attention.

If on Skin: Wash off with soap and water. Remove contaminated clothing. If skin irritation occurs: Get medical advice/attention.

If Swallowed: Rinse mouth, give 2-3 glasses of water to drink. Seek medical attention. Induce vomiting. Never give anything by mouth to an unconscious person. If needed seek medical advice.

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. Get medical advice if breathing becomes difficult.

Most important symptoms and effects, both acute and delayed

Symptoms: None known.

Notes to Doctor: Treat symptomatically.

Section 5. Fire Fighting Measures

Hazard Type	Non Flammable
Hazards from combustion products	Produces oxides of nitrogen on combustion: NyOx
Suitable Extinguishing media	Depending on the materials stored in the neighbourhood use following extinguishing media: foam, water spray, dry chemical powder, CO2. Unsuitable extinguishing media: none known.
Precautions for firefighters and special protective clothing	Fire-fighters should wear suitable protective clothing such as boots, overalls, gloves, eye and face protection and breathing apparatus. Do not allow to enter fire-fighting water to surface water or groundwater.
HAZCHEM CODE	None allocated

Section 6. Accidental Release Measures

Wear adequate personal protective equipment as detailed in Section 8. Ensure adequate ventilation.

Do not let product enter drains. If the product enters drains or water, immediately inform appropriate authorities.

Sweep up shovel. Contain spillage and then collect by wet-brushing and place in container for disposal according to local regulations. After removal, wash the contaminated area with water. Dispose of as per Section 13.

Section 7. Handling and Storage

Handling

- Avoid formation of dust.
- Handle in accordance with good industrial hygiene and safety practice.
- Use personal protective equipment according to section 8.
- Do not disposal to sewage system.

Storage

- Store away from incompatible materials listed in Section 10.
- Keep in original, tightly closed container in a dry place.
- Keep away from heat and source of ignition.
- Recommended storage temperature: -5°C till + 30°C.

Section 8 Exposure Controls / Personal Protection

WORKPLACE EXPOSURE STANDARDS (provided for guidance only)

Substance	TWA		STEL	
	ppm	mg/m ³	ppm	mg/m ³

No ingredients have 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

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www.techcomp.co.nz
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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 APRIL 2022 13TH EDITION.

DNEL:

- Workers - Hazard via inhalation route (long term exposure, systemic effect) – 12 mg/m³
- Workers - Hazard via inhalation route (acute/short term exposure, systemic effect) – No hazard identified
- Workers - Hazard via inhalation route (long term exposure, local effect) – No hazard identified
- Workers - Hazard via inhalation route (acute/short term exposure, local effect) – No hazard identified
- Workers - Hazard via dermal route (long term exposure, systemic effect) - 25 000 mg/kg bw/day
- Workers - Hazard via dermal route (acute/short term exposure, systemic effect) – No hazard identified
- Workers - Hazard via dermal route (long term exposure, local effect) – No hazard identified
- General population - Hazard via inhalation route (long term exposure, systemic effect) – 3 mg/m³
- General population - Hazard via inhalation route (acute/short term exposure, systemic effect) – No hazard identified
- General population - Hazard via inhalation route (long term exposure, local effect) – No hazard identified
- General population - Hazard via inhalation route (acute/short term exposure, local effect) – No hazard identified
- General population - Hazard via dermal route (long term exposure, systemic effect) - 12 500 mg/kg bw/day
- General population - Hazard via dermal route (acute/short term exposure, systemic effect) – No hazard identified
- General population - Hazard via oral route (long term exposure, systemic effect) – 2,5 mg/kg bw/day
- General population - Hazard via oral route (acute/short term exposure, systemic effect) – No hazard identified
- General population – Eyes (local effects) – No hazard identified

PNEC:

- PNEC aqua (freshwater) – 2,67 mg/L
- PNEC aqua (marine water) – 0,27 mg/L
- PNEC aqua (intermittent releases) – 1,07 mg/L
- PNEC STP - 64 mg/L
- Sediment (freshwater) – No exposure of sediment expected
- Sediment (marine water) - No exposure of sediment expected
- AIR - No hazard identified
- PNEC soil – 0,208 mg/kg soil dw
- PNEC secondary poisoning - No potential for bioaccumulation

Engineering Controls

Ensure adequate ventilation.

Personal Protective Equipment

Eyes	Use safety goggles.
Hands and Skin	Handle with protective gloves (recommended nitrile gloves, layer thickness 0,11 mm and breakthrough time > 480 minutes). Use protective clothing.
Respiratory	Not required.
Industrial Hygiene	Handle in accordance with good industrial hygiene and safety practice. Change contaminated clothing. Avoid contact with skin. Avoid breathing dust. Wash hands after working with substance. When using do not eat or drink. Immediately remove spilled substance.

Section 9 Physical and Chemical Properties

Appearance	Solid, microgranules
Colour	White to yellow
Odour	Odourless
Odour Threshold	Not available
pH	6,0 ± 0,5 (1% solution)
Boiling Point	Decomposes before boiling
Melting/Freezing Point	does not melt under 250°C and starts to decompose at 252°C.
Flash Point	Not available
Flammability	Not flammable
Upper and Lower Explosive Limits	Not available
Vapour Pressure	Not available
Relative Density	0,7 ± 0,50 g/cm ³
Solubilities	Soluble in water: 800 g/l
Partition Coefficient:	Not available
Auto-ignition Temperature	Not available
Decomposition Temperature	Starts to decompose at 252°C.
Kinematic Viscosity @ 20°C	Not available
Dynamic Viscosity @ 20°C	Not available
Particle Characteristics	0.2 – 1.2 mm
Manganese (Mn)	13.0 ± 0.4 % w/w

Section 10. Stability and Reactivity

Stability of Substance	This product is stable under normal conditions.
Conditions to Avoid	Keep away from heat.
Hazardous Reactions	No data available.
Incompatible Materials	None known.
Hazardous Decomposition Products	in the event of fire produces oxides of nitrogen NO _x .

Section 11 Toxicological Information**Acute Effects:**

Swallowed	Not applicable.
Dermal	Not applicable.
Inhalation	Not applicable.
Eye	Not applicable.
Skin	Not applicable.

Chronic Effects:

Carcinogenicity	Not applicable.
Reproductive Toxicity	Not applicable.
Germ Cell Mutagenicity	Not applicable.
Aspiration	Not applicable.

STOT/SE	Not applicable.
STOT/RE	Not applicable.

Individual component information:

Acute Toxicity:

Chemical Name	Oral – LD50	Dermal – LD50	Inhalation – LC50
Mn EDTA	> 2000 mg/kg (rat)	>2000mg/kg (rat)	> 5.16 mg/l/4hr (rat)

Section 12. Ecotoxicological Information

This product is not hazardous to the environment.

Product:	
Persistence and degradability	Mn EDTA is not readily biodegradable according to OECD criteria, but ultimately biodegradable under special environmental conditions (slightly alkaline pH). No biodegradation observed in activated sludge simulation test.
Bioaccumulation	Calculation with KOWWIN: Log Kow = -8.12. The calculated log Kow is less than the bioconcentration threshold (log Kow =3) indicating that EDTA-Mn Na2 is not Bioaccumulative (not B).
Mobility in Soil	The estimated log Koc values are less than the threshold value of 3, indicating no adsorbing potential for this compound. Additionally, since this compound is mostly negatively charged at relevant environmental pH values, reducing its chances of being adsorbed to soil minerals/humic acids.
Other adverse effects	Endocrine disrupting properties Does not included in the list established in accordance with Article 59(1) for having endocrine disrupting properties or identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

Individual component information:

Mn EDTA:

Route	Species	Duration	Value LC50/EC50
Acute aquatic, fish	Fish	96 hr	>1000 mg/L
Acute aquatic, Crustacean	Daphnia (water flea)	21 days	365 mg/L
Acute aquatic, Algal	Alga	72 hr	649.3 mg/L

Section 13. Disposal Considerations

Disposal Method:

Triple rinse container. Cleaned packaging maybe offered for recycling or landfill in accordance with local regulations. Dispose of unwanted product as a hazardous material according to Local Regulations.

Precautions and 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

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Section 15 Regulatory Information

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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.
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 APRIL 2022 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

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

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