

SAFETY DATA SHEET

Section 1. Identification of the material and the supplier

Product: **Dissolvine E-Mn-13**
 Product Use: Fertilizer. Fertilizer: raw material. Cleaning products
 Restriction of Use: Refer to Section 15

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

Telephone: +64 9 294 8453
 Fax Number: +64 9 294 7272

Emergency Telephone: 0800 764 766 (National Poison Centre)

Date of SDS Preparation: 15 March 2022

Section 2. Hazards Identification

Not classified as hazardous according to Regulation (EC) No. 1272/2008 [CLP] Mixtures/Substances which meets New Zealand jurisdiction criteria as per EPA Hazardous Substances (Classification) Notice 2020.

Section 3. Composition / Information on Ingredients

Ingredients	Wt%	CAS NUMBER.
Ethylenediaminetetraacetic acid, manganese disodium complex	Proprietary	Mixture

Section 4. First Aid Measures

Routes of Exposure:

If in Eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If on Skin: Rinse with water. Remove all contaminated clothing and footwear. If on skin and if skin irritation occurs, seek medical advice and attention.

If Swallowed: Rinse mouth with water. If victim conscious and alert, give 1-2 glasses of water to drink. Immediately call a POISON CENTER/doctor. Ingestion of large quantities: immediately to hospital.

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.

Advice to Doctor: Treat symptomatically.

Section 5. Fire Fighting Measures

Hazard Type	The product is non-flammable and non-combustible.
Hazards from products	Risks of ignition followed by flame propagation or secondary explosions shall be prevented by avoiding accumulation of dust, e.g. on floors and ledges. Fire will produce smoke containing hazardous combustion products (see section 10).
Suitable Extinguishing media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Precautions for firefighters and special protective clothing	In the event of fire, wear self-contained breathing apparatus.
HAZCHEM CODE	None allocated

Section 6. Accidental Release Measures

Ensure adequate air ventilation. Wear PPE as detailed in Section 8. Keep unnecessary and unprotected personnel from entering. Avoid dust formation.

No special environmental precautions required.

Any spillage should be cleaned up immediately. Sweep up and shovel. Dispose the product, depending on the degree and type of contamination, either as fertilizer or in an authorized waste disposal site.

Section 7. Handling and Storage

Precautions for Handling:

- For personal protection see section 8.
- Avoid creating dust.
- Keep away from heat/sparks/open flames/hot surfaces. No smoking.
- Provide appropriate exhaust ventilation at places where dust is formed.
- No sparking tools should be used.

Precautions for Storage:

- Keep in a dry place.
- Store at room temperature in the original container.
- Keep container tightly closed.
- No special restrictions on storage with other products.

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 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 NOV 2020 12TH EDITION.

Engineering Controls

Provide appropriate exhaust ventilation at places where dust is formed.

Personal Protection Equipment

Eyes	Safety glasses.
Skin	Nitrile rubber
Respiratory	No personal respiratory protective equipment normally required. In the case of dust, vapour or aerosol formation use a respirator with an approved filter. Half mask with a particle filter P2 (EN 143)

Section 9 Physical and Chemical Properties

Appearance	Granular
Colour	Off White
Odour	Odourless
Odour Threshold	Not available
pH	6 – 7.1% (water)
Boiling Point	Not available
Melting Point	Decomposes before melting
Freezing Point	Not available
Flash Point	Not available
Flammability	Not flammable
Upper and Lower Explosive Limits	Lower = ≥ 40 g/m ³
Vapour Pressure	Not available
Vapour Density	Not available
Relative Density	Not available
Bulk Density	600 – 800 jg/cm ³
Solubilities Water	ca. 800 g/l
Log Pow	Not available
ignition Temperature	≥ 200 °C Method: Auto-ignition of a 5mm dust layer according to EN 50281-2-1
Decomposition Temperature	Not available
Viscosity, dynamic	Not available
Particle Characteristics	Not available
Other Properties	Not available

Section 10. Stability and Reactivity

Stability of Substance	Stable under recommended storage conditions.
Reactivity	Dust may form explosive mixture in air.
Conditions to Avoid	None known.
Incompatible Materials	None known.
Hazardous Decomposition Products	Carbon oxides nitrogen oxides (NO _x)

Section 11 Toxicological Information

Acute Effects:

Swallowed	Not applicable. LD50 rat = >5000 mg/kg (rat)
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.

Section 12. Ecotoxicological Information

Not a hazard to the environment.

Toxicity

Test result

Toxicity to fish : LC50: > 1,000 mg/l
 Exposure time: 96 h
 Species: Danio rerio (zebra fish)

Oligo Borax 11% (1303-96-4)	
LC50 fishes 1	100 - 1000 mg/l (96 h; Pisces)
LC50 other aquatic organisms 1	100 - 1000 mg/l (96 h)
EC50 Daphnia 1	141 mg/l (48 h; Daphnia magna)
LC50 fish 2	1900 mg/l (Pimephales promelas)
Threshold limit other aquatic organisms 1	100 - 1000,96 h; Protozoa; ANHYDROUS FORM
Threshold limit other aquatic organisms 2	1 mg/l (72 h; Rana sp.)
Threshold limit algae 1	158 mg/l (96 h; Scenedesmus subspicatus; ANHYDROUS FORM)

Test Type: static test
 Read-across from supporting substance (structural analogue or surrogate).

Persistence and degradability	Not readily biodegradable.
Bioaccumulation	Not expected considering the low log Pow value.
Mobility in Soil	No data available.
Other adverse effects	No data available.

Section 13. Disposal Considerations

Disposal methods: Empty remaining contents. Empty containers should be taken to an approved waste handling site for recycling or disposal.

Precautions or conditions to avoid: None known.

Section 14 Transport Information

This product is NOT classified as a Dangerous Good for transport in NZ; NZS 5433:2012

Section 15 Regulatory Information

Not classified as hazardous according to Regulation (EC) No. 1272/2008 [CLP]Mixtures/Substances which meets New Zealand jurisdiction criteria as per EPA Hazardous Substances (Classification) Notice 2020.

HSWA & EPA Controls	Trigger Quantity
Certified Handler	Not required

Location Certificate	Not required
Tracking Trigger Quantities	Not required
Signage Trigger Quantities	Not required
Emergency Response Plan	Not required
Secondary Containment	Not required
Restriction of Use	None

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 Nov 2020 edition.
3. Assigning a hazardous substance to a HSNO Approval (Aug 2013).
4. Transport of Dangerous goods on land NZS 5433:2012
5. HSW (Hazardous Substances) Regulations 2017

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

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