

## SAFETY DATA SHEET

### Section 1. Identification of the material and the supplier

Product: Mag Trace + Mn 1%  
 Product No:  
 Product Use: Fertilizer  
 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: 3 September 2019

### Section 2. Hazards Identification

**This substance is hazardous according to the EPA Hazardous Substances (Classification) Notice 2017**

**Group Standard & EPA Approval Code: Fertilisers (subsidiary) - HSR002571**

#### Pictograms



Chronic

Signal Word: **WARNING**

HSNO Class.	Hazard Code	Hazard Statement	GHS Category
6.8B	H361	Suspected of damaging fertility or the unborn child.	Repr. 2

#### Prevention Code      Prevention Statement

P103	Read label before use.
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P281	Use personal protective equipment as required.

#### Response Code      Response Statement

P308 + P313	IF exposed or concerned: Get medical advice/ attention.
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**Storage Code          Storage Statement**

P405	Store locked up.
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**Disposal Code          Disposal Statement**

P501	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.
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**Section 3.          Composition / Information on Ingredients**

<b>Ingredients</b>	<b>Wt%</b>	<b>CAS NUMBER.</b>
Boric Acid	<5.5	10043-35-3

**Section 4.          First Aid Measures**

Routes of Exposure:

If in Eyes	Rinse cautiously with water for several minutes. If eye irritation occurs: Get medical advice.
If on Skin	Wash with plenty of soap and water. Remove contaminated clothes. If skin irritation occurs: get medical advice.
If Swallowed	Immediately rinse the mouth with water, then drink a lot of water. Consult the doctor in case of persistent trouble. Get medical assistance if you feel unwell.
If Inhaled	Unlikely route of exposure due to the form of the product - a non-dusting microgranules. 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:

<b>Ingestion:</b>	Not applicable
<b>Inhalation:</b>	Not applicable
<b>Skin:</b>	Not applicable
<b>Eye:</b>	Not applicable
<b>Chronic:</b>	Suspected of damaging fertility or the unborn child

**Notes to Doctor:** Symptomatic treatment.

**Section 5.          Fire Fighting Measures**

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

## Section 6. Accidental Release Measures

Wear suitable protecting clothes as detailed in Section 8. Ensure adequate ventilation.

Do not flush into public water courses. Do not empty into drains, ground or surface water and soil. 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.

## Section 7. Handling and Storage

### Handling

- Read label before use.
- Obtain special instructions before use.
- Do not handle until all safety precautions have been read and understood.
- Use personal protective equipment as required.
- Handle in accordance with good industrial hygiene and safety practice.
- Do not disposal to sewage system.
- Avoid formation of dust.

### Storage

- Store locked up.
- Keep in original, tightly closed container in a dry, cool place.
- Keep away from heat and source of ignition.
- Store away from incompatible materials listed in Section 10.

## Section 8 Exposure Controls / Personal Protection

### WORKPLACE EXPOSURE STANDARDS (provided for guidance only)

Substance	TWA		STEL	
	ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>

No ingredient has 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 2017 9TH EDITION.

### Engineering Controls

Ensure adequate ventilation is available to minimize exposure

### Personal Protection Equipment



<b>Eyes</b>	Use safety goggles.
<b>Hands</b>	Handle with protective gloves (recommended nitrile gloves, layer thickness 0,11 mm and breakthrough time > 480 minutes).
<b>Skin</b>	Use protective clothing.
<b>Respiratory</b>	Not required.
<b>General</b>	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 product. When using do not eat or drink. Immediately remove spilled product.
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## Section 9 Physical and Chemical Properties

<b>Appearance</b>	Solid, micro-granular
<b>Colour</b>	White
<b>Odour</b>	Odourless
<b>Odour Threshold</b>	Not applicable
<b>pH (1% solution)</b>	6.5 + 1.0
<b>Boiling Point</b>	Not applicable
<b>Melting Point</b>	Not applicable
<b>Freezing Point</b>	Not applicable
<b>Flash Point</b>	Not applicable
<b>Flammability</b>	Not flammable
<b>Upper and Lower Explosive Limits</b>	Not applicable
<b>Explosive hazards</b>	Not applicable
<b>Vapour Pressure</b>	Not applicable
<b>Vapour Density</b>	Not applicable
<b>Relative/Bulk Density</b>	0.85 ± 0.10 g/cm <sup>3</sup>
<b>Water Solubility</b>	Soluble in water
<b>Partition Coefficient:</b>	Not applicable
<b>Self-ignition</b>	Not available
<b>Decomposition Temperature</b>	Not applicable
<b>Kinematic Viscosity</b>	Not applicable
<b>Particle Characteristics</b>	Not applicable

## Section 10. Stability and Reactivity

<b>Stability of Substance</b>	This product is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	The mixture has low chemical reactivity.
<b>Conditions to Avoid</b>	Keep away from heat.
<b>Incompatible Materials</b>	None known.
<b>Hazardous Decomposition Products</b>	In the event of fire produces oxides of nitrogen NyOx

## Section 11 Toxicological Information

### Acute Effects:

<b>Swallowed</b>	Not applicable. LD50 (oral): =>5000 mg/kg.
<b>Dermal</b>	Not applicable.
<b>Inhalation</b>	Not applicable.
<b>Eye</b>	Not applicable.
<b>Skin</b>	Not applicable.

### Chronic Effects:

<b>Carcinogenicity</b>	Not applicable.
<b>Reproductive Toxicity</b>	Suspected of damaging fertility or the unborn child.
<b>Germ Cell</b>	Not applicable.

<b>Mutagenicity</b>	
<b>Aspiration</b>	Not applicable.
<b>STOT/SE</b>	Not applicable.
<b>STOT/RE</b>	Not applicable.

**Boric acid** – available toxicological data

Acute toxicity: not harmful

LD50 (oral) > 2 600 mg/kg bw (rat, OECD 401/EU Method B.1.)

LC50 (inhal.) > 2,03 mg/L powietrza (rat, 4h, OECD 403)

LD50 (dermal) > 2 000 mg/kg bw (rabbit, FIFRA 40 CFR 163)

Skin corrosion/irritation - no irritating, (rabbit, FIFRA (40 CFR 163) Serious eye damage/eye irritation - no irritating, (rabbit, OECD 405)

Respiratory or skin sensitization - no skin or respiratory sensitization (OECD 406) Germ cell mutagenicity - no mutagenic

Method OECD 482 – negative

Bacterial Reverse Mutation Assay (OECD 471, *S. typhimurium*) – negative

In vitro mammalian cell gene mutation test (wg. 40 CFR Part 158 US-EPA-FIFRA, Section 156.340) – genotoxicity – negative; cytotoxicity – the results depend on concentration.

Mammalian Erythrocyte Micronucleus Test (OECD Guideline 474) – negative Carcinogenicity - no carcinogenic (OECD Guideline 451, mouse)

Reproductive toxicity – May damage fertility. Suspected of damaging the unborn child. NOAEL 34-100 mg/kg bw of boric acid (equivalent 5.9 and 17.5 mg B/kg bw).

Specific target organ toxicity (STOT) - single exposure – not harmful (ASTM E981-04 (2004))

Specific target organ toxicity (STOT)- repeated exposure - not harmful (method similar to OECD 452),

Aspiration hazard – not applicable

**Section 12. Ecotoxicological Information**

This product is not known to be hazardous to the environment.

<b>Product:</b>	
<b>Persistence and degradability</b>	No data available
<b>Bioaccumulation</b>	No data available
<b>Mobility in Soil</b>	No data available
<b>Other adverse effects</b>	No data available

**Section 13. Disposal Considerations**

**Disposal Method:**

Triple rinse container. Add rinsate to waste container for disposal. 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 or methods to avoid:** None known.

**Section 14 Transport Information**

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

**Section 15 Regulatory Information**

**Group Standard & EPA Approval Code: Fertilisers (subsidiary) - HSR002571**

**HSNO Classification:** 6.8B

<b>HSW (HS) Regulations 2017 and EPA Notices</b>	<b>Trigger Quantity</b>
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	Only use for the intended purpose.

## Section 16 Other Information

### Glossary

EC <sub>50</sub>	Median effective concentration.
EEL	Environmental Exposure Limit.
EPA	Environmental Protection Authority
HSNO	Hazardous Substances and New Organisms.
HSW	Health and Safety at Work.
LC <sub>50</sub>	Lethal concentration that will kill 50% of the test organisms inhaling or ingesting it.
LD <sub>50</sub>	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 2017 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

### Disclaimer

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Please contact the Horticulture, if further information is required.

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