SAFETY DATA SHEET

Section 1. Identification of the material and the supplier

Product:	Mag Trace + B 0.95%
Product No:	
Product Use:	Fertilizer
Restriction of Use:	Refer to Section 15
New Zealand Supplier:	Horticentre 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.

Storage Code	Storage Statement
P405	Store locked up.

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.

Section 3. Composition / Information on Ingredients

Ingredients	Wt%	CAS NUMBER.
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:

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

Notes to Doctor: Symptomatic treatment.

Section 5. Fire Fighting Measures

Hazard Type	Non-Flammable
Hazards from decomposition products	Hazardous decomposition / 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, eyes 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 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 ppm	TWA mg/m^3	STEL ppm	STEL mg/m^3

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

Eyes	Use safety goggles.
Hands	Handle with protective gloves (recommended nitrile gloves, layer thickness 0,11 mm and breakthrough time > 480 minutes).
Skin	Use protective clothing.
Respiratory	Not required.
General	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.

Section 9 Physical and Chemical Properties

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

Section 10. Stability and Reactivity

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

Section 11 Toxicological Information

Acute Effects:

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

Chronic Effects:

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

Mutagenicity	
Aspiration	Not applicable.
STOT/SE	Not applicable.
STOT/RE	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 Assey (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.

Product:	
Persistence and degradability	No data available
Bioaccumulation	No data available
Mobility in Soil	No data available
Other adverse effects	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

HSW (HS) Regulations 2017 and EPA Notices	**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	Only use for the intended purpose.

Section 16 Other Information

Glossary

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 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

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

The information herein is given in good faith, but no warranty, express or implied is made.

Please contact the Horticentre, if further information is required.

Issue Date: 3 September 2019 Review Date: 3 September 2024