

SAFETY DATA SHEET

Section 1. Identification of the material and the supplier

Product: WUXAL Boron Plus
 Product No: 23238
 Product Use: Fertilizer
 Restrictions 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

New Zealand: **0800 764 766 (National Poison Centre)**

Date of SDS Preparation: 18 April 2018

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



Toxic/Irritant



Chronic

Signal Word: **WARNING**

HSNO Class.	Hazard Code	Hazard Statement	GHS Category
6.1E (oral)	H303	May be harmful if swallowed.	Acute Tox. 5
6.3B	H316	Causes mild skin irritation.	Skin Irrit. 3
6.4A	H319	Causes serious eye irritation.	Eye Irrit. 2A
6.8B	H361	Suspected of damaging fertility or the unborn child.	Repr. 2
9.1D	H413	May cause long lasting harmful effects to aquatic life.	Aquatic Chronic 4

Prevention Code Prevention Statement

P102	Keep out of reach of children.
P103	Read label before use.

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P264	Wash hands thoroughly after handling.
P273	Avoid release to the environment.
P280	Wear protective PPE as described in Section 8.
P281	Use personal protective equipment as required.

Response Code Response Statement

P101	If medical advice is needed, have product container or label at hand.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P331	Do NOT induce vomiting.
P305 + P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308 + P313	IF exposed or concerned: Get medical advice/ attention.
P332 + P313	If skin irritation occurs: Get medical advice/ attention.
P337 + P313	If eye irritation persists: Get medical advice/attention.

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

Ingredients	Wt%	CAS NUMBER.
Boric Acid	30-<45	10043-35-3
(1-hydroxyethylidene)bisphosphonic acid, sodium salt	2.5 - <3	29329-71-3
ammonium nitrate	2.5-<3	6484-52-2
Non hazardous	To bal	

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. 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	Immediately rinse the mouth with water. Seek medical advice if you feel unwell. Keep calm.
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:

Eyes:	Causes severe eye irritation.
Skin:	Causes mild skin irritation.
Swallowed:	May be harmful if swallowed

Chronic: Suspected of damaging fertility or the unborn child.

Indication of any immediate medical attention and special treatment needed

Treatment Treat symptomatically.

Section 5. Fire Fighting Measures

Hazard Type	Non Flammable
Hazards from combustion products	Nitrogen oxides, Ammonia, Phosphorus oxides
Suitable Extinguishing media	Water spray jet, Water mist, carbon dioxide, Powder Do not use: strong water jet
Precautions for firefighters and special protective clothing	Wear self-contained breathing apparatus. Do not allow water used to extinguish fire to enter drains, ground or waterways.
HAZCHEM CODE	None allocated

Section 6. Accidental Release Measures

Wear appropriate PPE as detailed in Section 8. Evacuate unnecessary personnel.

Do not allow to enter into surface water or drains.

Isolate leaked material using non-flammable absorption agent (e.g. sand, earth, vermiculit, diatomaceous earth) and collect for disposal in appropriate containers in accordance with the local regulations.

Section 7. Handling and Storage

Handling

- Keep out of reach of children.
- Read label before use.
- Obtain special instructions before use.
- Do not handle until all safety precautions have been read and understood.
- Wash hands thoroughly after handling.
- Avoid release to the environment.
- Wear protective PPE as described in Section 8.
- Use personal protective equipment as required.

Storage

- Store locked up.
- Store away from incompatible materials listed in Section 10 and away from food and feeding stuffs.
- Protect from heat and direct sunlight. Keep container tightly closed. Always keep in containers that correspond to the material of the original container.
- Take care of instructions on label. Store in a well-ventilated and dry room at temperatures between 5 °C and 40 °C.
- Carefully store closed containers upright to prevent any leaks.

Section 8 Exposure Controls / Personal Protection

WORKPLACE EXPOSURE STANDARDS (provided for guidance only)

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

Product Name: Wuxal Boron Plus
Date of SDS: 18 April 2018

Prepared by: Technical Compliance Consultants (NZ) Ltd
Tel: 64 9 475 5240

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.

Control parameters

DNEL:

(1-hydroxyethylidene)bisphosphonic acid, sodium salt

EC No. 249-559-4 / CAS No. 29329-71-3

DNEL long-term oral (repeated), Workers: 13 mg/kg bw/day

ammonium nitrate

EC No. 229-347-8 / CAS No. 6484-52-2

DNEL long-term dermal (systemic), Workers: 21,3 mg/kg

DNEL long-term inhalative (systemic), Workers: 37,6 mg/m³

boric acid

INDEX No. 005-007-00-2 / EC No. 233-139-2 / CAS No. 10043-35-3

DNEL long-term dermal (systemic), Workers: 392 mg/kg bw/day

DNEL long-term inhalative (systemic), Workers: 8,28 mg/m³

DNEL short-term oral (acute), Consumer: 0,98 mg/kg bw/day

DNEL long-term oral (repeated), Consumer: 0,98 mg/kg

DNEL long-term dermal (systemic), Consumer: 196 mg/kg bw/day

DNEL long-term inhalative (systemic), Consumer: 4,15 mg/m³

PNEC:

(1-hydroxyethylidene)bisphosphonic acid, sodium salt

EC No. 249-559-4 / CAS No. 29329-71-3

PNEC aquatic, freshwater: 0,136 mg/l

PNEC aquatic, marine water: 0,0136 mg/l

PNEC sediment, freshwater: 59 mg/kg ww

PNEC sediment, marine water: 5,9 mg/kg ww PNEC, soil: 96 mg/kg ww

PNEC sewage treatment plant (STP): 20 mg/l

ammonium nitrate

PNEC aquatic, marine water: 0,045 mg/l

PNEC aquatic, intermittent release: 4,5 mg/l

PNEC sewage treatment plant (STP): 18 mg/l

boric acid

INDEX No. 005-007-00-2 / EC No. 233-139-2 / CAS No. 10043-35-3

PNEC aquatic, freshwater: 2,02 mg B/L

PNEC aquatic, marine water: 2,02 mg B/L

PNEC, soil: 5,4 mg B/kg

PNEC sewage treatment plant (STP): 10 mg B/L

Engineering Controls

Technical measures and the application of suitable work processes have priority over personal protection equipment. No additional measures necessary.

Eyes	Wear eye glasses with side protection according to EN 166.
Hands and Skin	For prolonged or repeated handling the following glove material must be used: e.g. NBR (Nitrile rubber). Barrier creams can help protecting exposed skin areas.
Respiratory	Usually no personal respiratory protection necessary.
General	After contact clean skin thoroughly with water and soap or use appropriate cleanser.

Section 9 Physical and Chemical Properties

Appearance	Liquid
Colour	Green
Odour	Characteristic
Odour Threshold	Not available
pH @ 20°C	5.2 @ 20 °C
Boiling Point	Not available
Melting Point	Not available
Freezing Point	Not available
Flash Point	Not available
Flammability	The product is not flammable.
Upper and Lower Explosive Limits	Not available
Vapour Pressure	Not available
Relative Density @ 20°C	1.41 g/cm ³
Solubilities	Very soluble
Partition Coefficient:	Not available
Auto-ignition Temperature	Not available
Decomposition Temperature	Not available
Kinematic Viscosity	Not available
Particle Characteristics	Not applicable

Section 10. Stability and Reactivity

Stability of Substance	This product is stable under normal conditions.
Conditions to Avoid	Protect from heat and direct sunlight.
Hazardous Reactions	No hazardous reaction when handled and stored according to provisions.
Incompatible Materials	Alkali (lye)
Hazardous Decomposition Products	Does not decompose when used for intended uses. Hazardous decomposition byproducts may form with exposure to h temperatures: nitrogen oxides, Ammonia, Phosphorus oxides

Section 11 Toxicological Information**Acute Effects:**

Swallowed	May be harmful if swallowed.
Dermal	Not applicable.
Inhalation	Not applicable.
Eye	Causes severe irritation to eyes.
Skin	Causes mild skin irritation.

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.

Components:**Ammonium nitrate:**

Acute oral toxicity : LD50 (Rat): 2217 mg/kg

Boric Acid:

Acute oral toxicity : LD50 (Rat): 466 mg/kg

(1-hydroxyethylidene)bisphosphonic acid, sodium salt

Acute oral toxicity : LD50 (Rat): >1340 mg/kg

Section 12. Ecotoxicological Information

HSNO Classifications: 9.1D= May cause long lasting harmful effects to aquatic life.

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

Do not allow to enter waterways.

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:

Do not allow to enter into surface water or drains where possible.

Section 14 Transport Information**This product is NOT classified as a Dangerous Good for transport in NZ ; NZS 5433:2012****Section 15 Regulatory Information**

EPA Approval Code: Fertilisers (subsidiary) – HSR002571

HSNO Classification: 6.1E(oral), 6.3B, 6.4A, 6.8B, 9.1D

HSNO Controls:

Trigger quantities for this substance:

	Trigger Quantity
Certified Handler	Not required
Location Certificate	Not required
Tracking Trigger Quantities	Not applicable
Signage Trigger Quantities	10 000L (9.1D)
Emergency Response Plan trigger Quantities	10 000L (9.1D)
Restrictions of use	None

Section 16 Other Information**Glossary**EC₅₀

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

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

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