

## SAFETY DATA SHEET

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

Product: WUXAL<sup>®</sup> Boron  
 Product No: 22232  
 Product Use: Fertiliser, preparation for plant nutrition.  
 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: 25 July 2019 v2

### 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



Irritant



Chronic

Signal Word: **WARNING**

HSNO Class.	Hazard Code	Hazard Statement	GHS Category
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	H402	Harmful to aquatic life.	Aquatic Chronic 4

#### Prevention Code      Prevention Statement

P103	Read label 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.

P280/1	Wear protective clothing and equipment.
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**Response Code                      Response Statement**

P338	Remove contact lenses, if present and easy to do. Continue rinsing.
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	40%	10043-35-3

**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. Apply continuous irrigation with water for at least 15 minutes holding eyelids apart. 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, then drink a lot of water. Consult the doctor in case of persistent trouble.
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:

<b>Ingestion:</b>	Not applicable
<b>Inhalation:</b>	Not applicable
<b>Skin:</b>	Causes mild skin irritation.
<b>Eye:</b>	Causes serious eye irritation.
<b>Chronic:</b>	Suspected of damaging fertility or the unborn child.

**Section 5.                      Fire Fighting Measures**

<b>Hazard Type</b>	Non Flammable
<b>Hazards from decomposition products</b>	The material itself is harmless and hardly inflammable. Ambient fire may liberate hazardous vapours. If larger quantities of the product are on fire, the formation of nitrous gases, ammonia and phosphoric acid gases

	is possible.
<b>Suitable Extinguishing media</b>	Water, carbon dioxide, dry extinguishing media.
<b>Precautions for firefighters and special protective clothing</b>	Do not stay in dangerous zone without suitable protecting clothes and self-contained breathing apparatus. Contain escaping vapours with water. Prevent fire-fighting water from entering surface water or groundwater.
<b>HAZCHEM CODE</b>	<b>1X</b>

**Section 6. Accidental Release Measures**

Avoid substance contact. Wear closed working clothes, protecting glasses and hand protection. Remove soiled clothes.

Take up with absorption media. Disposal of contaminated material as waste according to section 13.

Ensure that the product does not reach the ground-water, water bodies or the drainage system.

**Section 7. Handling and Storage**

**Handling**

- Read label 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 clothing and equipment.

**Storage**

- Protect the product from impurity and drying up.
- Keep containers tightly closed.
- Keep locked up or in an area accessible only to qualified or authorised persons.
- Do not store below +5 °C and above +40 °C.
- Do not store together with food and luxury food, beverage and animal feed. Oxidizing agents, combustible substances.

**Section 8 Exposure Controls / Personal Protection**

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

<b>Substance</b>	<b>TWA</b> <b>ppm mg/m<sup>3</sup></b>	<b>STEL</b> <b>ppm mg/m<sup>3</sup></b>
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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 to minimize exposure

## Personal Protection Equipment



<b>Eyes</b>	Safety goggles with side shields.
<b>Hands</b>	In full or splash contact: Glove material: nitrile rubber Layer thickness: 0.11 mm Breakthrough time: > 480 Min.
<b>Skin</b>	Closed working clothes and skin-protective barrier cream
<b>Respiratory</b>	Required when vapours/aerosols are generated. Filter P 2 (acc. to DIN 3181) for solid and liquid particles of harmful substances.
<b>General</b>	Immediately change contaminated clothing. Apply skin-protective barrier cream. Wash hands and face after working with substance.

### Section 9 Physical and Chemical Properties

<b>Appearance</b>	Aqueous crystal suspension
<b>Colour</b>	Green
<b>Odour</b>	Product specific
<b>Odour Threshold</b>	Not applicable
<b>pH (original state)</b>	Approx 6.5
<b>pH at 13g/l H<sub>2</sub>O and 20°C:</b>	Approx 7
<b>Change in physical state</b>	> 100°C evaporation of water
<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 applicable
<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>Density @ 20°C</b>	approx. 1.4 g/cm <sup>3</sup>
<b>Water Solubility @ 20°C</b>	Approx 200g/l
<b>Partition Coefficient:</b>	Not applicable
<b>Self-ignition</b>	The product is not spontaneously flammable.
<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>	None known.
<b>Conditions to Avoid</b>	Temperatures above +40° C. Keep the product from drying up.
<b>Incompatible Materials</b>	Strong Oxidiser.
<b>Hazardous Decomposition Products</b>	If larger quantities of the product are on fire, the formation of nitrous gases, ammonia and phosphoric acid gases is possible.

## 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>	Cause serious eye irritation.
<b>Skin</b>	Causes mild skin irritation.

### Chronic Effects:

<b>Carcinogenicity</b>	Not applicable.
<b>Reproductive Toxicity</b>	Suspected of damaging fertility or the unborn child.
<b>Germ Cell Mutagenicity</b>	Not applicable.
<b>Aspiration</b>	Not applicable.
<b>STOT/SE</b>	Not applicable.
<b>STOT/RE</b>	Not applicable.
<b>Other</b>	After uptake of large quantities: Possible symptoms: agitation, spasms, tiredness, ataxia (impaired locomotive coordination), drop in temperature.

### Individual component information:

#### Acute Toxicity:

<b>Chemical Name</b>	<b>Oral – LD50</b>	<b>Dermal – LD50</b>	<b>Inhalation – LC50</b>
Boric Acid (Cas no 10043-35-3)	2668 mg/kg (mouse)	-	-

## Section 12. Ecotoxicological Information

HSNO Classes: 9.1D = Toxic to aquatic life.

<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

Fertilizer material.

The following applies to boron compounds in general:

Biological effects: boric acid developing as a result of hydrolysis toxic for aquatic organisms;  
fish: *Gambusia affinis* 96 h. LC<sub>50</sub>: 5600 mg/l;  
24 h. LC<sub>50</sub>: 1800 mg/l;  
plants: as toxic from 1 mg/l

Ensure that the product does not reach the ground-water, water bodies or the drainage system.

## 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:** Do not allow to enter waterways.

**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: 6.3B, 6.4A, 6.8B, 9.1D

<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	10 000L (9.1D)
Emergency Response Plan	10 000L (9.1D)
Secondary Containment	10 000L (9.1D)
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.

Issue Date: 25 July 2019 Review Date: 25 July 2024

Product Name: WUXAL Boron  
Date of SDS: 25 July 2019

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