

## SAFETY DATA SHEET

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

Product: **Triabon**  
 Item Code: 000000001322502001  
 Product Use: Fertiliser  
 Restriction of Use: Refer to Section 15

New Zealand Supplier: HortFertplus  
 Address: 18 Cabernet Crescent  
 Westgate, Auckland 0614  
 Telephone: +64 9 478 5585

**Emergency Telephone: 0800 764 766 (National Poison Centre)**

Date of SDS Preparation: 27 October 2016

### Section 2. Hazards Identification

This substance is hazardous according to the *HSNO (Minimum Degrees of Hazard) Regulations 2001*

**EPA Approval No: Fertilisers (subsidiary) – HSR002571**

#### Pictograms



Allergic

Signal Word: Warning

HSNO Classification	Hazard Code	Hazard Statement	GHS Category
6.5B	H317	May cause an allergic skin reaction.	Category 1

Prevention Code	Prevention Statement
P103	Read label before use.
P261	Avoid breathing dust.
P272	Contaminated work clothing should not be allowed out of the workplace.
P280	Wear protective clothing.
P281	Use personal protective equipment as required.

Response Code	Response Statement
P363	Wash contaminated clothing before reuse.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.

<b>Storage Code</b>	<b>Storage Statement</b>
None allocated	

<b>Disposal Code</b>	<b>Disposal Statement</b>
P501	Dispose of according to Local Regulations or Authorities

### Section 3. Composition / Information on Ingredients

Ingredients	Wt%	CAS NUMBER.
Manganese Sulphate	≤0.4	7785-87-7
Copper Sulphate	≤0.2	7758-98-7

### Section 4. First Aid Measures

Routes of Exposure:

If in Eyes	Rinse cautiously with water for 15 minutes. 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	Rinse mouth. Drink plenty of water. Never give anything to the mouth of an unconscious person. If vomiting occurs, place victim face downwards, with the head turned to the side and lower than the hips to prevent vomit entering the lungs. Seek medical attention if needed.
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.

### Section 5. Fire Fighting Measures

<b>Hazard Type</b>	Not flammable
<b>Hazards from combustion products</b>	Can decompose at above 100 °C. Thermal decomposition products: carbon monoxide Carbon dioxide (CO <sub>2</sub> ) Nitrogen monoxide, nitrogen dioxide, dinitrogenoxide, ammonia
<b>Suitable Extinguishing media</b>	Water Unsuitable: Foam, Dry chemical, Carbon dioxide (CO <sub>2</sub> ) and Sand
<b>Precautions for firefighters and special protective clothing</b>	Self-contained breathing apparatus.
<b>HAZCHEM CODE</b>	<b>None Allocated</b>

### Section 6. Accidental Release Measures

Wear protective equipment as detailed in Section 8. Clear area of any unprotected personnel.

Use mechanical handling equipment for cleanup.

Do not empty into drains. Retain and dispose of contaminated wash water.

### Section 7. Handling and Storage

**Precautions for Handling:**

- Read label before use.
- Avoid breathing dust.
- Contaminated work clothing should not be allowed out of the workplace.
- Wear protective clothing.
- Use personal protective equipment as required.

**Precautions for Storage:**

- Do not store together with incompatible materials listed in Section 10.
- When stored loose do not mix with other fertilizers.
- Store well away from other substances.
- Keep away from direct sunlight.
- Protect against heat.
- Protect against humidity (product is hygroscopic and tends to cake or disintegrate)

<b>Section 8</b>	<b>Exposure Controls / Personal Protection</b>
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**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>
No ingredients have exposure limits		

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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.*

**Engineering Controls**

Ensure Adequate ventilation is available

**Personal Protection**

<b>Eyes</b>	Not required
<b>Hands and Skin</b>	Protective gloves.
<b>Respiratory</b>	Breathing apparatus only if aerosol or dust is formed. Respirator with a particle filter (EN 143) - P1 filter

<b>Section 9</b>	<b>Physical and Chemical Properties</b>
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<b>Appearance</b>	Various colours - granular
<b>Odour</b>	Odourless
<b>Odour Threshold</b>	Not available
<b>pH</b>	ca. 6,1, Concentration: 100 g/l (20 °C)
<b>Boiling Point</b>	Not available
<b>Melting Point</b>	>130 <sup>0</sup> C
<b>Freezing Point</b>	Not available
<b>Flash Point</b>	Not available
<b>Flammability</b>	The product is not flammable
<b>Upper and Lower Explosive Limits</b>	Not available
<b>Vapour Pressure</b>	Not available
<b>Vapour Density</b>	Not available
<b>Bulk Density</b>	ca. 950 kg/m <sup>3</sup>
<b>Solubilities</b>	Soluble
<b>Partition Coefficient:</b>	Not available
<b>Auto-ignition Temperature</b>	Not available
<b>Decomposition</b>	Ca 100 °C

<b>Temperature</b>	To avoid thermal decomposition, do not overheat. Thermal decomposition above the indicated temperature is possible.
<b>Kinematic Viscosity</b>	Not available
<b>Particle Characteristics</b>	Not applicable

## Section 10. Stability and Reactivity

<b>Stability of Substance</b>	This product is stable under normal conditions.
<b>Conditions to Avoid</b>	None known
<b>Incompatible Materials</b>	alkaline reactive substances.
<b>Hazardous Decomposition Products</b>	No decomposition if stored and applied as directed.

## Section 11 Toxicological Information

### Acute Effects:

<b>Swallowed</b>	Not applicable.
<b>Dermal</b>	Not applicable.
<b>Inhalation</b>	Not applicable.
<b>Eye</b>	Not applicable.
<b>Skin</b>	May cause an allergic skin reaction.

### Chronic Effects:

<b>Carcinogenicity</b>	Not applicable.
<b>Reproductive Toxicity</b>	Not applicable.
<b>Germ Cell Mutagenicity</b>	Not applicable.
<b>Aspiration</b>	Not applicable.
<b>STOT/SE</b>	Not applicable.
<b>STOT/RE</b>	Not applicable.

### Components:

#### **copper sulphate:**

Acute oral toxicity : LD50 Oral (Rat): 300 mg/kg

#### **manganese sulphate (1:1):**

Acute oral toxicity : LD50 (Rat): 2.150 mg/kg  
Exposure time: 4 h  
Method: OECD Test Guideline 436

## Section 12. Ecotoxicological Information

This product is not hazardous to the environment.

### Toxicity

#### Components:

#### **copper sulphate:**

Toxicity to fish : LC50 (Salmo sp.): 0,1 - 2,5 mg/l  
Exposure time: 96 h

Toxicity to daphnia and other : EC50 (Daphnia magna (Water flea)): 0,024 mg/l  
aquatic invertebrates Exposure time: 48 h

Toxicity to algae : EC50 (Scenedesmus quadricauda (Green algae)): 0,1 mg/l  
Exposure time: 4 h

**manganese sulphate (1:1):**

Toxicity to daphnia and other : EC50 (Daphnia magna (Water flea)): 30 mg/l aquatic invertebrates

<b>Persistence and degradability</b>	The organic components of the product are biodegradable. The methods for determining the biological degradability are not applicable to inorganic substances. Can be oxidized to nitrate, or be reduced to nitrogen, by microorganisms.
<b>Bioaccumulation</b>	No bioaccumulation is to be expected (log Pow ≤4).
<b>Mobility in Soil</b>	No data available
<b>Other adverse effects</b>	There is a high probability that the product is acute not harmful to aquatic organisms. At higher pH values, which can be found in natural surface waters, an increase of toxic effects on aquatic organisms may be expected. The product has not been tested. The information is derived from the properties of the individual components.

### Section 13. Disposal Considerations

**Disposal Method:** Contaminated packaging should be emptied as far as possible; then it can be passed on for recycling after being thoroughly cleaned. Ensure waste container holding any unwanted product or contaminated spill media is labelled "Hazardous Waste"

**Precautions:** None known.

**Disposal methods to avoid:** Avoid release to the environment 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: 6.5B

HSNO Controls:

**Trigger quantities for the substance:**

	<b>Trigger Quantity</b>
Approved Handler	Not required
Location Certificate	Not required
Tracking Trigger Quantities	Not required
Signage Trigger Quantities	Not required
Emergency Response Plan	1000kg
Secondary Containment	1000kg
Restriction of Use	None

### 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.
LC <sub>50</sub>	Lethal concentration that will kill 50% of the test organisms

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LD <sub>50</sub>	inhaling or ingesting it.
LEL	Lethal dose to kill 50% of test animals/organisms.
OSHA	Lower explosive level.
TEL	American Occupational Safety and Health Administration.
TLV	Tolerable Exposure Limit.
UEL	Threshold Limit Value-an exposure limit set by responsible authority.
WES	Upper Explosive Level
	Workplace Exposure Limit

1. HSNO Approved Code of Practice: Preparation of Safety Data Sheets, September 2006.

#### Disclaimer

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