



SAFETY DATA SHEET

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

1.1 Product Identifiers

Product Name **LIQUITEC Trace**

1.2 Uses and uses advised against

Uses Trace Element Supplement

1.3 Details of the Supplier of the product

Company NUTRIAN Pty Ltd
PO Box 470
Melville WA 6956
Australia

Telephone +61 (0)8 9384 9046

Fax +61 (0)8 9384 9047

1.4 Emergency Telephone Number

Emergency **+61 (0)43 777 0283**

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

CLASSIFIED AS HAZARDOUS ACCORDING TO CRITERIA OF GLOBALLY HARMONISED SYSTEM OF CLASSIFICATION AND LABELLING OF CHEMICALS (GHS)

Specific target organ (repeated exposure)	Category 2
Skin irritation	Category 3
Hazardous to the aquatic environment (chronic)	Category 1

2.2 Label Elements, including precautionary statements

Pictogram





Signal Word	Warning
Hazard Statement(s)	
H315	Causes skin irritation.
H373	May cause damage to organs through prolonged or repeated exposure
H411	Toxic to aquatic life with long lasting effects
Precautionary Statement(s)	
Prevention	
P264	Wash skin thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P280	Wear protective gloves and eye protection/ face protection.
P260	Do not breathe dust/mist/ vapours/spray.
Response	
P314	Get medical advice/ attention if you feel unwell.
Disposal	
P501	Dispose of contents/ container to an approved waste disposal plant.

2.3 Other hazards None

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances/Mixtures

Ingredient	CAS Number	EC Number	Concentration
Manganese Sulfate	7785-87-7	232-089-9	< 10 % w/v
Ferrous Sulfate	7720-78-7	231-753-5	< 10 % w/v
Other ingredients not required to be disclosed			
Water	7732-18-5	231-791-2	Remainder

4. FIRST AID MEASURES

4.1 Description of first aid measures

General advice:	In case of serious personal contamination always seek medical help immediately.
Eye contact	If symptoms persist seek medical assistance. Irrigate holding the eyelids open with copious amounts of eyewash or clean water for 15 minutes minimum.



Inhalation	Remove from exposure and provide maximum ventilation. If symptoms persist seek medical attention.
Skin Contact	Remove contaminated clothing. Wash immediately with soap and rinse with copious amounts of water.
Ingestion	Rinse mouth with water. Seek medical assistance. Never give anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed

See Section 11 for more details on the most important symptoms and health effects

4.3 Immediate medical attention and special treatment needed

Treat symptomatically. For specialist advice doctors should contact the nearest **Poisons Information Centre 13 11 26**.

5. FIRE FIGHTING MEASURES

5.1 Extinguishing media

This product is not classified as combustible or flammable. All extinguishing media can be used.

5.2 Special hazards arising from the substance or mixture

Aqueous liquid. Does not present any combustion risk in the event of a fire.

5.3 Advice for firefighters

No fire or explosion hazard exists

5.4 Further information/Hazchem Code

None allocated

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Avoid contact with skin and eyes. Avoid unnecessary contact with product. Ensure adequate ventilation of the working area. Remove all contaminated clothing. See Section 8 for details of Personal Protective Equipment

6.2 Environmental precautions

Rinse empty containers with water and add to mix. **Do not let product enter drains or waterways.**

6.3 Methods and materials for containments and cleaning up

Absorb spill with inert absorbent material (eg sand) collect and dispose of appropriately. Collect waste into suitable containers.



6.4 Reference to other sections

See Section 8 for Exposure Controls and Section 13 for Disposal Requirements

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Handle and use in accordance with safe work practices. Avoid eye and skin contact. Eating, drinking and smoking in work areas is prohibited. Wash hands after use. Use in well-ventilated areas.

7.2 Conditions for safe storage, including any incompatibilities

Keep sealed in original container. Store in frost-free, dry conditions out of direct sunlight, above 5°C and below 30°C. Store away from combustible materials, herbicides, fungicides and human and animal consumables. Store away from children, pets, livestock and foodstuffs.

7.3 Specific end use(s) Trace Element Supplement

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Exposure Standards Mn, dust and compounds (as Mn) TWA 1 mg/m³

8.2 Exposure Controls

Engineering controls

Use only in a well-ventilated area. Wash hands before meals and after work. Avoid breathing mist when spraying.

Personal Protective Equipment

Eye/Face Protection	Wear splash proof goggles or face shield
Skin Protection	Wear PVC/nitrile gloves and boots
Body Protection	Wear Tyvek coveralls
Respiratory Protection	Not required under normal conditions of use



9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	Light brown to light green liquid
Odour	None
Odour threshold	No data available
pH	7 – 7.8 (2g/100mL aqueous solution)
Melting point	No data available
Boiling point	Approx. 100°C
Flash point	Non-flammable
Evaporation rate	No data available
Flammability	Non-flammable
Upper explosion limit	Non-flammable
Lower explosion limit	Non-flammable
Vapour pressure	No data available
Vapour density	No data available
Specific gravity	1.65 g/cm ³ at 20°C
Solubility in water	Soluble in all proportions
Autoignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available
Explosive properties	Non-flammable
Oxidising properties	Non-oxidising

9.2 Other information

No data available

10. STABILITY AND REACTIVITY

10.1 Reactivity

Hazardous reactions are unlikely to occur under normal conditions of use.

10.2 Chemical stability

Stable under recommended storage conditions

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

No data available



10.5 Incompatible materials

Incompatible with strong bases and oxidising agents (eg hypochlorites).

10.6 Hazardous decomposition products

No hazardous decomposition products are expected.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity	Harmful if swallowed
Eye	May cause eye irritation. May cause redness, irritation and pain.
Skin	May cause skin irritation. May cause redness, itching and pain.
Respiratory	May be harmful if inhaled. May cause irritation to upper respiratory tract.
Ingestion	Harmful if swallowed. Ingestion of large quantities may lead to nausea, vomiting, inflammation of mucous membranes and stomach ulceration. May cause severe irritation to the mouth, throat and digestive tract
Carcinogenicity	No component of this product is identified as probable, possible or confirmed human carcinogen by IARC.
Other information	Men exposed to manganese dusts showed a decrease in fertility. Chronic manganese poisoning primarily involves the central nervous system. Early symptoms include sleepiness and weakness in the legs. A mask-like appearance of the face, emotional disturbances such as uncontrollable laughter and a spastic gait with tendency to fall in walking are findings in more advanced cases.

12. ECOLOGICAL INFORMATION

12.1 Toxicity	Toxic to aquatic life
12.2 Persistence and degradability	No data available
12.3 Bioaccumulative potential	No data available
12.4 Mobility in soil	No data available
12.5 Other adverse effects	No data available

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Waste disposal	Requires controlled waste disposal in accordance with all local and national regulations.
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Containers

Do not re-use packaging for any other purpose. Dispose of used packaging in accordance all local and national regulations.

14. TRANSPORT INFORMATION

NOT CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE, IMDG OR IATA

14.1 UN Number	None allocated
14.2 Proper shipping name	None allocated
14.3 Transport hazard class(es)	None allocated
14.4 Packing group	None allocated
14.5 Environmental hazards	None allocated
14.6 Special precautions for user	
Hazchem code	None allocated

15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Poison Schedule	A Poison Schedule number has not been allocated
Carcinogen classification	Not listed
Notification status	
AICS	Components are listed on the AICS or are exempt

16. OTHER INFORMATION

Additional information

Full text of H-Statements referred to under sections 2 and 3

H315	Causes skin irritation.
H373	May cause damage to organs through prolonged or repeated exposure
H411	Toxic to aquatic life with long lasting effects



Revision history

Revision	Description
1.0	Initial SDS Creation

Further Information

The information in the MSDS relates to this specific material and is supplied only as a guide for the safe use, storage and handling of the product. This information relates only to the specific material designated and may not be valid if the product is used in combination with any other product or material, or as a part of any other process. The information contained is correct to the best of our knowledge and belief at the date of publication. However, no guarantee is made as to its accuracy and the information is provided without any warranty, expressed or implied, regarding its correctness.

Revision: 1
SDS Date: November 2016

End of SDS