

MATERIAL SAFETY DATA SHEET

PRODUCT: TRACE ELEMETS

Date of Issue: 1 DEC 2016

Valid until: 1 DEC 2021

GHS Format

1. IDENTIFICATION OF MATERIAL & SUPPLIER

Product (material) Name: Manutec Trace Elements mix - soluble

Other names: None

Manufacturer's code: MTO5006/MTO5006B/MTO2506

Recommended use: as a trace element fertiliser to correct number of trace elements deficiencies.

Manufacturer/Supplier Information:

Name: MANUTEC PTY LTD

Address: 30 Jonal drive, Cavan, South Australia 5094

Telephone No:+61-8-8260 2277 **Fax:**+61-8-8260 2399

Email: manutec@manutec.com.au

Emergency contact only: Poisons Information Centre (Australia) 131126

2. HAZARDS IDENTIFICATION

Poisons Schedule: None Scheduled

Hazard Classification:

Hazard Classification: Hazardous according to the criteria of the Globally Harmonised System of Classification and Labelling of Chemicals (GHS)

Hazard Categories:

Acute Toxicity (Oral) - Category 4

Skin Corrosion/Irritation - Category 2

Serious Eye Damage/Irritation - Category 2A

Pictograms:



Signal Word:

Warning

Hazard Statements:

H302 Harmful if swallowed.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

Precautionary Statements:

Prevention	P264	Wash hands thoroughly after handling.
	P270	Do not eat, drink or smoke when using this product.
	P273	Avoid release to the environment.
	P280	Wear protective gloves/protective clothing/eye protection/face protection as appropriate depending on volume of handling.
Response	P301 + P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
	P330	Rinse mouth.
	P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
	P332 + P313	If skin irritation occurs: Get medical advice/attention.
	P363	Wash contaminated clothing before reuse.
	P321	Specific treatment (see First Aid Measures on Safety Data Sheet).
	P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313	If eye irritation persists: Get medical advice/attention.	
Disposal	P501	Dispose of contents/container in accordance with local / regional / national / international regulations.

National Transport Commission (Australia)

Dangerous Goods Classification

NOT Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Entity	CAS Number	Proportion
Calcium Carbonate	471-34-1	<=30%
Magnesium Sulphate	10034-99-8	<=30%
Iron Chelate	15708-41-5	<=10%
Iron Sulphate	7782-63-0	<=8%
Manganese Sulphate	7785-87-7	<=10%
Zinc Sulphate	7733-02-0	<=5%
Copper Sulphate	7758-99-8	<=5%
Sodium Borate	1303-96-4	<=0.8%
Sodium Molybdate	10102-40-6	<=0.1%

4. FIRST AID MEASURES

Description of necessary measures according to routes of exposure

Swallowed	Do not induce vomiting. Give 1-2 glasses of water to a conscious victim. Never give anything by mouth to an unconscious victim. Get medical attention
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Eye	Immediately flush eyes with running water for at least 20 minutes holding eyelids open. Get medical attention.
Skin	Immediately wash with plenty of soap and water. Get medical attention if irritation occurs.
Inhaled	Move victim to fresh air. If not breathing, give artificial respiration. Get medical attention.
Advice to Doctor	Treat symptomatically based on individual reactions of patient and judgement of doctor.

Medical Conditions Aggravated by Exposure

No information available on medical conditions which are aggravated from exposure to this product

5. FIRE FIGHTING MEASURES

General Measures

Clear fire area of all non-emergency personnel. Stay upwind. Keep out of low areas. Eliminate ignition sources. Move fire exposed containers from fire area if it can be done without risk.

Flammability Conditions	Product is a non-flammable solid.
Extinguishing Media	Water, dry powder, foam, carbon dioxide.

Hazardous Products of Combustion

Heating to dryness will produce obnoxious and toxic fumes.

Special Fire Fighting Instructions

Do NOT allow fire fighting water to reach waterways, drains or sewers. Store fire fighting water for treatment

Personal Protective Equipment

Fire fighters should wear a positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots and gloves).

Flash Point	No Data Available
Lower Explosion Limit	No Data Available
Upper Explosion Limit	No Data Available
Auto Ignition Temperature	No Data Available
Hazchem Code	No Data Available

6. ACCIDENTAL RELEASE MEASURES

General Response Procedure

Avoid accidents, clean up immediately.
Increase ventilation. Avoid generating dust. Stop leak if safe to do so.
Isolate the danger area. Use clean, non-sparking tools and equipment.

Clean Up Procedures

Use Gloves and protective gear as per section 8 and shovel into suitable container for disposal.

Decontamination	Rinse affected area with plenty of water.
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Environmental Precautionary Measures

Do NOT let product reach drains or waterways. If product does enter a waterway, advise the Environmental Protection Authority or your local Waste Management.

7. HANDLING AND STORAGE

Handling	Ensure an eye bath and safety shower are available and ready for use. Observe good personal hygiene practices and recommended procedures. Wash thoroughly after handling. Take precautionary measures against static discharges by bonding and grounding equipment. Avoid contact with eyes, skin and clothing. Do not inhale product dust/fumes.
Storage	Store in a cool, dry, well-ventilated area. Keep containers tightly closed when not in use. Inspect regularly for deficiencies such as damage or leaks. Protect against physical damage. Store away from incompatible materials as listed in section 10. This product is not classified dangerous for transport according to The Australian Code for the Transport of Dangerous Goods By Road and Rail.
Container	Store in original packaging as approved by manufacturer

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

General	No exposure standard has been established for this product. However, the exposure standard for dust not otherwise specified is 10mg/m ³ (for inspirable dust) and 3mg/m ³ (for respirable dust).
Exposure Limits	No Data Available
Biological Limits	No information available on biological limit values for this product.
Personal Protection Equipment	RESPIRATOR: wear an effective dust mask where dusts/vapours are generated EYES: Safety glasses as necessary (AS1336/1337). HANDS: Wear rubber or plastic gloves while handling (AS2161). CLOTHING: When handling large quantities and in a factory production atmosphere, use Long-sleeved protective clothing and safety footwear (AS3765/2210).

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Solid
Appearance	Crystalline Powder
pH	6 - 8
Vapour Pressure	No Data Available
Relative Vapour Density	No Data Available
Boiling Point	No Data Available
Melting Point	No Data Available
Freezing Point	No Data Available
Solubility	soluble in water

Specific Gravity	No Data Available
Flash Point	No Data Available
Auto Ignition Temp	No Data Available
Evaporation Rate	No Data Available
Bulk Density	No Data Available

10. STABILITY AND REACTIVITY

General Information	Product is a non-flammable solid.
Chemical Stability	Product is stable under normal conditions of use, storage and temperature.
Conditions to Avoid	Avoid excessive heat, generating dust, direct sunlight, moisture and high temperatures.
Materials to Avoid	Incompatible with strong oxidising agents, bases, mineral acids and sources of ignition.
Hazardous Decomposition Product	Not been reported/assessed
Hazardous Polymerisation	Hazardous Polymerisation has not been reported.

11. TOXICOLOGICAL INFORMATION

EyeIrritant	Eye irritation may result.
Ingestion	Swallowing can result in nausea, vomiting, diarrhoea, and gastrointestinal irritation. Ingestion of large quantities can be dangerous and harmful, no sufficient data available.
General Information	
<u>Acute toxicity:</u> TDLo (man, oral): 183 mg/kg/4h-l	
LDLo (mouse, oral): 5000 mg/kg bw	
<u>Skin:</u>	Not sensitizing
Carcinogen Category	No Data Available

12. ECOLOGICAL INFORMATION

Ecotoxicity	No Data Available
Persistence/Degradability	Not biodegradable.
Mobility	miscible in water.
Environmental Fate	Do NOT allow product to reach waterways, drains and sewers.
Bioaccumulation Potential	No information available on bioaccumulation for this product.
Environmental Impact	No Data Available

13. DISPOSABLE CONSIDERATIONS

General Information Dispose of in accordance with all local, state and federal regulations. All empty packaging should be disposed of in accordance with Local, State, and Federal Regulations or recycled/reconditioned at an approved facility.

14. TRANSPORT INFORMATION

Land Transport (Australia)

Proper Shipping Name	No Data Available
Class	No Data Available
Subsidiary Risk(s)	No Data Available
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available

National Transport Commission (Australia)

Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

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15. REGULATORY INFORMATION

General Information	No Data Available
Poisons Schedule (Aust)	Not scheduled

National/Regional Inventories

Australia (AICS)	Not Listed
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16. OTHER INFORMATION

The MSDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

STATEMENT OF DISCLAIMER:

This Material Safety Data Sheet has been developed according to WHS Code of Practice Preparation of Safety Data Sheets for Hazardous Chemicals Guidelines and written in accordance with GHS format.

All information is as accurate and up-to-date as possible. Since Manutec Pty Ltd cannot anticipate or control the conditions under which this information may be used, each user should review the information in the specific context of the intended application. Manutec Pty Ltd will not be responsible for damages of any nature resulting from use of or reliance upon this information.

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