

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Hi- Mang
Product Type: Liquid Fertiliser
Company Name: Hi-Tech Ag Solutions
 24 Shanahan Road (PO Box 5351)
 Davenport WA 6230 Australia
Phone: 08 9725 7322
Emergency Contact: 0499 944 099
Date of Issue: 12th December 2024

2. HAZARDS IDENTIFICATION

Hazard Classification: Hazardous according to the criteria of GHS classification
 Non Dangerous Goods. according to the Australia Dangerous Goods Code.

GHS Classification: Specific Target Organ Toxicity (repeated Exposure) – Cat 2

Label Elements:



Signal Word: Warning

Hazard Statement: H373 – May cause damage to organs through prolonged or repeated exposure.

Precautionary Statement(s): P260 - Do not breathe dust or mists

Disposal: P501 - Dispose of Contents/container to an approved waste disposal plant.

3. INFORMATION ON INGREDIENTS

Chemical	CAS No.	Proportion
Manganese Sulphate	10034-96-5	15 – 45%
Other Fertilizer ingredients determined not to be hazardous	N/A	Up to 100%

4. FIRST AID MEASURES

Inhalation: Remove victim to fresh air and keep at rest position comfortable for breathing until fully recovered.

Ingestion: Rinse mouth with water. Seek medical attention or call poisons information centre.

Skin Contact: Remove contaminated clothing, rinse skin with water. Seek medical advice if irritation persists.

Eye: Rinse with plenty of clean water, seek medical advice, if irritation persists.

First Aid Facilities: Eyewash and normal washroom facilities

Advice to Doctor: Treat symptomatically.

Other Information: For advice in an emergency, contact a Poisons Information Centre (Phone Australia 13 1126; New Zealand 0800 POISON / 0800 764 766) or a doctor at once.

Company Name: Hi-Tech Ag Solutions
 24 Shanahan Road (PO Box 5351)
 Davenport WA 6230 Australia

Phone: 08 9725 7322

Emergency Contact: 0499 944 099

5. FIRE FIGHTING MEASURES

Flammability:	Non-Flammable and non-combustible material.
Specific Hazards:	May decompose on heating and emit harmful vapours.
Precautions in connection with Fire:	Fire fighters should wear Self-Contained Breathing Apparatus (SCBA) and full protective clothing to prevent exposure to vapours or fumes. Dike area to prevent runoff and contamination of water sources. Suitable for most extinguishing media.
Hazchem Code:	Not Regulated

6. ACCIDENTAL RELEASE MEASURES

Emergency Procedures:	Wear appropriate PPE to minimise exposure. Increase ventilation. If possible, contain the spill. Place sand, earth or vermiculite on spillage. Collect the material and place into a suitable labelled container. Do not flush down drains or into water ways.
Other Information:	Large spills may be reportable to the state and/or local regulatory agencies

7. HANDLING AND STORAGE

Precautions for Safe Handling:	Avoid contact with skin and eyes, wear appropriate PPE. Do not inhale spray mist.
Conditions for Safe Storage:	Store in a cool, dry, well-ventilated area, out of direct sunlight Store in original, labelled containers. Keep containers closed when not in use.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

National Exposure Standards:	No exposure value assigned for this specific material
Biological Limit Values:	No biological limits allocated.
Engineering Controls:	Use with good general ventilation or with respiratory protection.
PPE:	
Eye Protection:	Safety glasses with side shields should be worn
Hand Protection:	Wear gloves of impervious material
Body Protection	Wear chemical resistant overalls



General hygiene considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Brown –Pink liquid	Melting Point:	N/A
Solubility in Water:	miscible in water	Boiling Point:	>100° C
Specific Gravity:	1.29 – 1.43	Flash Point:	N/A
pH Value	4.9 – 6.1	Flammability:	Not flammable
Vapour Pressure:	N/A	Auto-Ignition Temperature	N/A
Vapour Density (Air=1):	N/A	Flammable Limits:	N/A

Note: Physical data typical values but may vary from sample to sample. A typical value should not be construed as a guaranteed analysis or as a specification

10. STABILITY AND REACTIVITY

Chemical Stability:	Stable under normal conditions of storage and handling.
Conditions to Avoid:	Excessive heat. Do not store near heat or flame. Direct sunlight.
Hazardous Decomposition of Products:	Possible sulphur and Manganese compounds, oxides of sulphur may be release.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity:	Harmful: serious damage to health by prolonged or repeated exposure, if inhaled.
Skin	No data available

Eye:	No data available
Respiratory or skin irritation:	Data not available
Germ Cell Mutagenicity:	Data not available
Carcinogenicity	Data not available
Reproductive Toxicity:	Data not available
STOT – single exposure	Data not available
STOT- repeated exposure:	Data not available

12. ECOLOGICAL INFORMATION

Eco toxicity:	No data available
Persistence/Degradability:	Data not available
Mobility in soil:	Data not available
Other Adverse Effects:	Toxic to Aquatic life with long lasting effects.

13. DISPOSAL CONSIDERATIONS

Dispose of in appropriately licence general landfill site in accordance with local, state and federal regulations. Waste should be labelled. Special arrangements made to bury bulk waste upon dumping, limiting exposure.

14. TRANSPORTATION INFORMATION

The product is a not considered a dangerous good and not subject to the provisions of ADR (road), RID (railway), IMDG (sea) or IATA (airplane).

15. REGULATORY INFORMATION

Poisons Schedule: Not scheduled

16. OTHER INFORMATION

This information is based on collective and current knowledge, is intended to describe the product for purposes of safety, environmental and health requirements only. It should therefore not be construed as guaranteeing any specific property of the product. The SDS is prepared by Hi Tech Ag (PTY) LTD

Key/Legend

<	Less Than	atm	Atmosphere
>	Greater Than	CAS	Chemical Abstracts Service (Registry Number)
AICS	Australian Inventory of Chemical Substances	cm ²	Square Centimetres
CO₂	Carbon Dioxide	COD	Chemical Oxygen Demand
(°C)	Degrees Celsius	K	Kelvin
g	Grams	GHS	Globally Harmonised System
g/cm ³	Grams per Cubic Centimetre	g/l	Grams per Litre
mmHg	Millimetre of Mercury	Kg	Kilogram
Kg/m ³	Kilograms per cubic metre	lb	Pound
LC50	Lethal Concentration of a material in air which causes the death of 50% of a group of test animals.	LD 50	Lethal dose of material given all at once, which causes death of 50% of a group of test animals.
Ltr/L	Litre	m ³	Cubic meter
mbar	Minibar	mg	Milligram

mg/24H	Milligrams per 24 Hour	mg/kg	Milligrams per Kilogram
mg/m³	Milligrams per Cubic Metre	mm	Millimetre
mmH2O	Millimetres of Water	mPa.s	Millipascals per Second
N/A	Not Applicable	NIOSH	National Institute for Occupational Safety and Health
NOHSC	National Occupational Health and Safety Commission	OECD	Organisation for Economic Co-operation and Development
Oz	Ounce	PEL	Permissible Exposure Limit
Pa	Pascal	ppb	Parts per Billion
ppm	Parts per Million	ppm/2h	Parts per Million per 2 Hours
ppm/6h	Parts per Million per 6 Hours	psi	Pounds per Square Inch
R	Rankine	RCP	Reciprocal Calculation Procedure
STOT	Specific Target Organ Toxicity	TLV	Threshold Limit Value
Tne	Tonne	TWA	Time Weighted Average
µg/24H	Micrograms per 24 Hours	UN	United Nations
wt.	Weight	Immiscible : Liquids are insoluble in each other	
Misc. or Miscible liquids form one homogenous liquid phase regardless of the amount of either component.			

Issued By: Hi-Tech Ag Solutions
SDS – Hi-Mang – Ver 3.2
Date of Issue: 12th December 2024
Revision Date: December 2029