

Safety Data Sheet

Maxi Mang Turf revision SDS 01 7th Aug 2020

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name MAXI MANG TURF™
Other Names None
Uses: Plant food, activator and catalyst, for professional applicators
Chemical family Inorganic mineral based plant nutrition
Chemical formula Compounded product see section 3
Chemical name No Data Available
Product description Liquid fertiliser, for the correction/prevention of nutrient deficiencies

Contact details of the supplier of this Safety Data Sheet

Company Name Agrichem
Company address 2 Hovey Rd
 Yatala QLD 4207 Australia
Phone number + 61 7 3451 0000
Emergency contact Poison Information Centre Australia – 13 11 26

2. HAZARD IDENTIFICATION

Poisons Schedule (Australian (SUSMP)) Not listed

Globally Harmonised System Hazard classification Hazardous according to the criteria of the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) and Safe Work Australia code of practice, preparation of Safety Data Sheets for hazardous chemicals (SWACOPSDS).

Hazard Category Acute oral category 4

Pictograms

Exclamation mark



Signal word Warning

Hazard Statements

Health hazard H302+H312+H332 Harmful if swallowed, in contact with skin, or if inhaled.
 H320 Causes eye irritation.

Precautionary Statements

Prevention P234 Keep only in original container.
 P264 Wash exposed skin thoroughly after handling.
 P280 Wear protective gloves/protective clothing/eye protection/face protection
 P273 Avoid release to the environment.



Response	P301+330+331 P303+361+353	IF SWALLOWED: Rinse mouth. Do Not induce vomiting. IF ON SKIN: (or hair) Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.
	P304+340	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
	P305+351+338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Storage	P310	Immediately call POISON CENTRE or doctor/physician
Disposal	P405	Store locked up
	P501	Dispose of contents / container in accordance with local/regional/national or international regulations

National Transport Commission (Australian)

Australian Code for the transport of Dangerous Goods by Road and Rail (ADG Code)

Dangerous Goods Classification

Is **NOT** a Dangerous Goods according to the criteria of the ADG Code for road or rail transport ref ADG Code 7.4.

3. INFORMATION ON INGREDIENTS

Ingredients

Chemical entity	CAS Registry Number	Proportion %w/w
Water	7732-18-5	Balance
Manganese carbonate	598-62-9	<60

No other ingredients present which to the knowledge of the supplier and at the concentrations present, are classified as hazardous to health or the environment thereby require reporting in this section.

4. FIRST AID MEASURES

Description of necessary measures according to routs of exposure

Swallowed	Call the Poisons Information Centre Australia or a doctor for treatment advice. Have the person sip a glass of water / milk if able to swallow. Do not induce vomiting unless told to do so by the Poison Information Centre or by a doctor. Do not give anything by mouth to an unconscious person.
Eye	Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Remove contact lenses if present and easy to do so. Call a medical doctor or poison information centre for treatment advice.
Skin	Immediately remove any contaminated clothing. Wash skin, & hair with soap or mild detergent and water for at least 15 minutes. Call the Poison Information Centre or a medical doctor for treatment advice if irritation persists. Wash clothing before re-use.
Inhalation	Remove to fresh air. If not breathing call ambulance, give artificial respiration, use pocket mask with one way valve or other respiratory medical device. If breathing is difficult give oxygen. Call a doctor / physician or the Poison Information Centre for treatment advice.



Advice to Doctor Treat symptomatically based on judgement of doctor and individual reactions of patient.

Medical Conditions Aggravated by Exposure No Data Available

Have the product container or label with you when calling the Poison Information Centre or a doctor or going for treatment.

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	Non-combustible, aqueous suspension.
Extinguishing Media	Use any means suitable for extinguishing surrounding fire.
Fire and Explosion Hazard	Non-combustible. Containers if heated, resultant increase in pressure may cause container to burst.
Hazardous Products of Combustion	May include the following, carbon monoxide & dioxide nitrogen oxides and manganese oxide/oxides. Avoid breathing vapours, fumes and dust from burning product. Inhalation of decomposition products caused by fire, symptoms may be delayed.
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 Procedures Avoid accidents, clean up immediately. Slippery when spilt. Eliminate all sources of ignition. Increase ventilation. Avoid generating dust from dried product. Stop leak if safe to do so. Isolate the danger area. Use clean non sparking tools and equipment.



Clean up Procedures

Land spill:

Dike spill with using absorbent or impervious materials such as earth, sand or clay. Vacuum, shovel, pump or sweep up the product and place in containers for disposal in accordance with applicable local regulations. Avoid contamination of water bodies during clean up and disposal. See containment section below.

Spillage into water:

Where possible, remove any intact containers from the water. Advise local water authority that none of the affected water should be used for irrigation or for the abstraction of potable water until natural dilution returns the elements listed in section 3 to its normal environmental background level. Product is largely insoluble, and will over time settle on bottom of water way and may be removed by dredging / skimming top sediment layer from the bottom of waterway.

Containment

Stop Leak if safe to do so. Isolate the danger area. Dike and absorb spill using inert absorbent materials such as earth, sand, clay, zeolite, or diatomaceous earth

Environmental Precautionary Measures

DO NOT let product reach drains or waterways. If product does enter a waterway, advise the Environmental Protection Authority and local Waste Management. The product is largely insoluble in water however high concentrations may cause damage to plant roots and foliage via absorption (see section 12)

Evacuation Criteria

Evacuate all unnecessary personal from immediate area

Personal Precautionary Measures

Personal involved in the clean-up should wear full protective clothing as listed in section 8. Note adding water to this product will cause rapid heating and possible steam explosion.

7. HANDLING AND STORAGE

Handling

Prevent against physical damage. Wash hands after handling this material. Good housekeeping splash and dust (when product dries) prevention procedures should be followed to minimize exposure and accumulation. Ensure an eye bath and safety shower are available and ready for use. Observe good personal hygiene practices and recommended procedures. Avoid contact with eyes, skin and clothing. Do not inhale product mist, spray or fumes. Your supplier can advise you on safe handling, please contact the supplier. Apply above handling advice when mixing with other substances.

Storage

Store in a cool, dry, well-ventilated area. Keep containers tightly closed if not in use. Inspect regularly for hazards such as damage or leaks. Protect against physical damage. Store away from incompatible materials as listed in section 10. Do not store with food stuffs. Use good housekeeping practices to prevent accumulation of product and follow sound cleaning techniques that will prevent contamination. Dry indoor storage is recommended. Provide appropriate ventilation and store containers such as to prevent any accidental damage.

Container

Store in original packaging as approved by manufacturer

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

General

No Data Available for this product. Limited data is available for the components and is listed below.

Ingredient

Exposure standard



Manganese
carbonate

TWA based on elemental Manganese in dust form is 1mg/m³

This exposure standard is a guide to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. These exposure standards should not be used as sharp delineations between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

Exposure Limits

No Data Available ref to above TWA's for product components

Biological limits

No information on biological limit values for this product.

Engineering Measures

A system of local and or general exhaust is recommended to keep employee exposure as low as possible. Local exhaust extraction / ventilation is preferred as it controls emissions at the source preventing dispersion of the general work area. Adequate ventilation should be provided so that exposure limits are not exceeded.

Personal Protection Equipment PPE

RESPIRATOR: Respirators should be used for conditions of use where exposure to spray or mist is apparent and engineering controls are not feasible, a full face gas respirator should be worn (AS1715/1716).

EYES: Use chemical safety goggles. Maintain eye wash fountain and quick drench facilities in work area (AS1336/1337).

HANDS: Gloves, chemical resistant (AS2161).

CLOTHING: Lab coat, apron or coveralls and safety footwear (AS3765/2210).

Work Hygienic practices

Thoroughly wash hands, forearms and face after using product, prior to eating, smoking using toilet or at end of work period. Contaminated clothing to be laundered prior to re-use.



9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Liquid
Appearance	opaque suspension
Odour	Slight, Characteristic
Colour	Beige / brown
pH	8.0 – 9.5
Vapour pressure	No Data Available
Relative Vapour Density	No Data Available
Boiling point	No Data Available
Melting point	No Data Available
Freezing point	< 4 deg Celsius
Solubility in water	Insoluble
Specific gravity	1.83 – 1.86
Flash point	No Data Available
Auto Ignition Tem	No Data Available
Decomposition temp	No Data Available
Molecular weight	No Data Available
Particle size	No Data Available
Particle size distribution	No Data Available
Viscosity	No Data Available

Note: Physical data are 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

General Information	This product is stable under normal handling and storage conditions.
Chemical Stability	Stable under ordinary conditions.
Conditions to Avoid	Excessive heat, do not store near heat or flames.
Materials to Avoid	<ol style="list-style-type: none">1. Strong bases- may decompose vigorously, may release ammonia.2. Strong oxidizing agents – may decompose.



Hazardous Products of Decomposition
Hazardous Polymerization

Under normal handling and storage conditions, hazardous products of decomposition should not be produced
No Data Available

11. TOXICOLOGICAL INFORMATION

General Information No Data Available for the product

Eye Irritant May cause irritation

Ingestion Harmful if swallowed

Inhalation May be harmful if inhaled

Skin Irritant May cause skin irritation

Reproduction No Data Available

Carcinogen Category No Data Available

Toxicity for components of this product

Ingredient	Exposure route	Species	Dose	Ref
Manganese carbonate	Oral	In the Rat	LD ₅₀ >2000 mg/kg	ECHA

12. ECOLOGICAL INFORMATION

Ecotoxicity No Ecological information is available for this product

Algal toxicity: No Data Available

Invertebrate toxicity: No Data Available

Persistence/ Degradability No Data Available

Mobility Fully water soluble.

Environmental Fate Do NOT let product reach waterways, drains and sewers

Bioaccumulation Not Data Available

Environmental impact No Data Available

Eco toxicity for components of this product

Ingredient	Exposure	Species	Dose	Ref
Manganese carbonate	48 hours	Daphnia magna	EC ₅₀ >3.6 mg/l fresh water	ECHA

13. DISPOSAL CONSIDERATIONS

General Information

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

Special Precautions for Landfill

Small quantities of this product can usually be disposed of at Liquid Waste Disposal sites. No special disposal treatment is required, but local authorities should be consulted about any specific local requirements. Larger volumes of this product are not recommended to be sent to Liquid Waste Disposal sites. Such product should, if possible, be used for an appropriate application. Do not incinerate as oxides of sulphur may be produced.

14. TRANSPORTATION INFORMATION

Land Transport, Australian Dangerous Goods Code (ADG Code)

	This product is not considered a goods and is not subject to the provisions of ADR Code for transport by road or rail.
Proper Shipping Name	Not applicable to non-dangerous goods
Class	Not applicable to non-dangerous goods
EPG	Not applicable to non-dangerous goods
UN Number	Not applicable to non-dangerous goods
Packaging group	Not applicable to non-dangerous goods

Air transport: International Air Transport Association (IATA)

UN Number	Not regulated
UN Proper Shipping Name	Not applicable to non-dangerous goods
Transport Hazard Classes	Not applicable to non-dangerous goods
Packaging group	Not applicable to non-dangerous goods
Environmental Hazards	No
Additional Information:	
Marine Pollutant	No

15. REGULATORY INFORMATION

General information
Poisons Schedule

Australian inventory ((AICS(NICNAS) all components are either listed or exempt
Not listed

16. OTHER INFORMATION

The information contained in this SDS is by way of general comment only. Because conditions of use, suitability of product and application conditions are beyond the control of Agrichem, this SDS does not offer any advice in respect to any product. The authors and Agrichem Manufacturing Industries Pty Ltd hereby disclaim any liability to any person, property, or thing in respect of any consequence of anything done or omitted to be done by any person in reliance, whether wholly or in part, upon whole or part of the contents of this SDS.

Key

< Less than

> Greater than

a.i. Active ingredient

ADG Code Australian dangerous goods code

AICS Australian Inventory of Chemical Substances

ATE Acute toxicity estimation

atm Atmosphere

CAS Chemical Abstract Service (registry number)

Cm² Square Centimetres

CO₂ Carbon Dioxide

deg C (°C) Degrees Celsius

EPA Environmental Protection Agency based in each state of Australia

g Grams

g/cm³ Grams per Cubic Centimetre

g/l Grams per Litre

HSIS Hazardous substances information system

HSNO Hazardous substances and New Organism

HDPE High density polypropylene

IDLH Immediately Dangerous to Life and Health

Immiscible Liquid are insoluble in each other

inHg inch of Mercury

InH₂O Inch of Water

K Kelvin

kg Kilogram

kg/m³ Kilogram per Cubic Metre

LC₅₀ LC stands for lethal concentration, LC₅₀ is the concentration of a product in air that will cause the death of 50% of a population of test animals. Product is normally inhaled for between 1 and more typically 4 hours

LD₅₀ LD stands for lethal dose. LD₅₀ is the amount of product given in a single dose, causing death in 50% of a population of test animals.

LDLo The lowest amount of a solid or liquid material reported to have caused the death of animals or humans

m³ Cubic Metre

mbar Millibar

mg Milligram

mg/24H Milligrams per 24 hours

mg/kg Milligrams per Kilogram

mg/m³ Milligrams per Cubic Metre

Misc or **Miscible** Liquids from one homogeneous liquid phase regardless of the amount of either component present

mm Millimetre

mmH₂O Millimetres of Water

mPa.s Millipascals per Second

MSHA Mine safety and health administration

N/A Not Applicable

NIOSH National Institute for Occupational Safety and Health

NOHSC National Occupational Health and Safety Commission

OECD Office for Economic Co-operation and Development

PEL Permissible Exposure Limit

Pa Pascal

ppb Parts per Billion

PPE personal protective equipment

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

SCBA Self Contained Breathing Apparatus

SWA Safe Work Australia

STEL Short Term Exposure Limit

TVL Threshold Limit Value

TWA Time Weighted Average

UN United Nations

wt Weight

End of SDS