

Safety Data Sheet

according to WHS Regulations

Printing date 15.02.2023

Revision date: 15.02.2023

1 Identification

Product Name: TITAN COPPER HYDROXIDE 400 WG FUNGICIDE**Other Means of Identification:** Mixture**APVMA Approval Number:** 89296**Recommended Use of the Chemical and Restriction on Use:** Agricultural fungicide**Details of Manufacturer or Importer:**

Titan Ag Pty Ltd
Princes Street Marina
Suite 15/16 Princes Street
Newport NSW 2106

Phone Number: 02 9999 6655**Emergency telephone number:** 02 9999 6655

2 Hazard(s) Identification

Hazardous Nature:

Classified as Hazardous according to the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) and Safe Work Australia criteria.

Not classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail (7th edition). Classified as Dangerous Goods when transported by Air or Sea. See section 14 of this document for more details.



Environment

Aquatic Acute 1

H400 Very toxic to aquatic life.

Aquatic Chronic 1

H410 Very toxic to aquatic life with long lasting effects.



Acute Toxicity (Oral) 4

H302 Harmful if swallowed.

Acute Toxicity (Inhalation) 4

H332 Harmful if inhaled.

Signal Word Warning**Hazard Statements**

H302 Harmful if swallowed.

H332 Harmful if inhaled.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary Statements

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P264 Wash thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P271 Use only outdoors or in a well-ventilated area.

P273 Avoid release to the environment.

P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

P330 Rinse mouth.

P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P391 Collect spillage.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

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3 Composition and Information on Ingredients

Chemical Characterization: Mixtures

Description: Mixture of substances listed below with nonhazardous additions.

Hazardous Components:

CAS: 20427-59-2	Copper(II) hydroxide ⚠ Acute Toxicity (Inhalation) 2, H330; ⚠ Eye Damage 1, H318; ⚠ Aquatic Acute 1, H400 (M=10); Aquatic Chronic 1, H410 (M=10); ⚠ Acute Toxicity (Oral) 4, H302	63.5 - 69.8%
CAS: 371-47-1	Disodium maleate ⚠ Acute Toxicity (Oral) 4, H302; Skin Sensitisation 1B, H317; STOT SE 3, H335	<1%

4 First Aid Measures

General Information:

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

Inhalation:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention if breathing problems develop.

Skin Contact:

In case of skin contact, immediately remove contaminated clothing and wash affected areas with water and soap for at least 15 minutes. Seek medical attention if symptoms occur.

Eye Contact:

In case of eye contact, hold eyelids open and rinse with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Seek medical attention if irritation occurs.

Ingestion:

If swallowed, do not induce vomiting. Immediately rinse mouth with water. Never give anything by mouth to an unconscious person. Seek immediate medical attention.

Symptoms Caused by Exposure:

Inhalation: Harmful if inhaled. May cause headaches, weakness and unconsciousness.

Skin Contact: No adverse health effects expected.

Eye Contact: May cause eye irritation.

Ingestion: Harmful if swallowed. May cause irritation and burns to the mouth and throat, nausea, diarrhoea and low blood pressure.

5 Fire Fighting Measures

Suitable Extinguishing Media: Dry chemical or carbon dioxide. Do not use full water jet.

Specific Hazards Arising from the Chemical:

Hazardous combustion products include oxides of copper and water.

This product is not flammable, but may burn or decompose in a fire.

Containers close to fire should be removed if safe to do so. Use water spray to cool fire exposed containers.

HAZCHEM Code: 2Z

Special Protective Equipment and Precautions for Fire Fighters:

When fighting a major fire wear self-contained breathing apparatus and protective equipment.

6 Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures:

Wear approved dust/particulate filter respirator and full protective clothing. Evacuate all non-essential personnel from affected area. Do not breathe dust. Ensure adequate ventilation. Avoid generating dust.

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Environmental Precautions:

In the event of a major spill, prevent spillage from entering drains or water courses.

Methods and Materials for Containment and Cleaning Up:

Stop leak if safe to do so and granules into a pile and shovel into drums for subsequent disposal. Avoid generating dust. Provide adequate ventilation. Do not wash spill with water.

7 Handling and Storage

Precautions for Safe Handling:

Use of safe work practices are recommended to avoid eye or skin contact and inhalation of dust. Food, beverages and tobacco products should not be stored or consumed where this material is in use. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use. Provide eyewash fountains and safety showers in close proximity to points of potential exposure.

Conditions for Safe Storage:

Store in a cool, dry and well ventilated area. Keep container tightly closed when not in use. Protect from extreme temperatures and moisture. Keep between 0 °C and 40 °C. Keep away from acids and ammonium salts.

8 Exposure Controls and Personal Protection

Exposure Standards:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

Engineering Controls: Ensure adequate ventilation of the working area.**Respiratory Protection:**

Where an inhalation risk exists, a Class P1 (particulate) respirator is recommended. See Australian/New Zealand Standards AS/NZS 1715 and 1716 for more information.

Skin Protection:

Chemical resistant gloves. See Australian/New Zealand Standard AS/NZS 2161 for more information. When selecting gloves for use against certain chemicals, the degradation resistance, permeation rate and permeation breakthrough time should be considered.

Occupational protective clothing (depending on conditions in which it has to be used, in particular as regards the period for which it is worn, which shall be determined on the basis of the seriousness of the risk, the frequency of exposure to the risk, the characteristics of the workstation of each worker and the performance of the protective clothing). See Australian/New Zealand Standard AS/NZS 4501 for more information.

Eye and Face Protection:

Eye and face protectors for protection against dust. See Australian/New Zealand Standard AS/NZS 1337 for more information.

9 Physical and Chemical Properties

Appearance:

Form:	Granulate
Colour:	No information available
Odour:	Odourless
Odour Threshold:	No information available
pH-Value at 20 °C:	8 - 10
Melting point/freezing point:	No information available
Initial Boiling Point/Boiling Range:	No information available
Flash Point:	>61 °C
Flammability:	Product is not flammable
Auto-ignition Temperature:	>600 °C
Decomposition Temperature:	140 °C

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Explosion Limits:	
Lower:	No information available
Upper:	No information available
Vapour Pressure:	No information available
Relative Density at 20 °C:	0.65 - 0.85
Vapour Density:	No information available
Evaporation Rate:	No information available
Solubility in Water:	Practically insoluble
Partition Coefficient (n-octanol/water):	No information available
Viscosity:	No information available
Solids content:	100.0 %

10 Stability and Reactivity

Possibility of Hazardous Reactions: Hazardous polymerisation will not occur.

Chemical Stability: Stable at ambient temperature and under normal conditions of use.

Conditions to Avoid: Extreme temperatures and moisture.

Incompatible Materials: Acids and ammonium salts.

Hazardous Decomposition Products: Oxides of copper and water.

11 Toxicological Information

Toxicity:

LD50/LC50 Values:

Oral	LD50	>300-<2,000 mg/kg (Rattus norvegicus (rat))
Dermal	LD50	>2,000 mg/kg (Rattus norvegicus (rat))
Inhalation	LC50/4 h	>1.043 mg/l (Rattus norvegicus (rat))

Acute Health Effects

Inhalation: Harmful if inhaled. May cause headaches, weakness and unconsciousness.

Skin: No adverse health effects expected.

Eye: May cause eye irritation.

Ingestion:

Harmful if swallowed. May cause irritation and burns to the mouth and throat, nausea, diarrhoea and low blood pressure.

Skin Corrosion / Irritation: Based on classification principles, the classification criteria are not met.

Serious Eye Damage / Irritation: Causes serious eye damage.

Respiratory or Skin Sensitisation: Based on classification principles, the classification criteria are not met.

Germ Cell Mutagenicity: Based on classification principles, the classification criteria are not met.

Carcinogenicity:

Based on classification principles, the classification criteria are not met.

This product does NOT contain any IARC listed chemicals.

Reproductive Toxicity: Based on classification principles, the classification criteria are not met.

Specific Target Organ Toxicity (STOT) - Single Exposure:

Based on classification principles, the classification criteria are not met.

Specific Target Organ Toxicity (STOT) - Repeated Exposure:

Based on classification principles, the classification criteria are not met.

Aspiration Hazard: Based on classification principles, the classification criteria are not met.

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Chronic Health Effects: May cause damage to the liver and kidneys.**Existing Conditions Aggravated by Exposure:** No information available**Additional toxicological information:** No information available

12 Ecological Information

Ecotoxicity:**Aquatic toxicity:** Very toxic to aquatic life with long lasting effects.**Persistence and Degradability:** Product is not degradable.**Bioaccumulative Potential:** Copper does not bioaccumulate.**Mobility in Soil:** Copper is strongly adsorbed by soils. Mobility is negligible.**Other adverse effects:** No further relevant information available.

13 Disposal Considerations

Disposal Methods and Containers: Dispose according to applicable local and state government regulations.**Special Precautions for Landfill or Incineration:**

Please consult your state Land Waste Management Authority for more information.

14 Transport Information

UN Number ADG, IMDG, IATA	UN3077
Proper Shipping Name ADG, IMDG, IATA	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (contains copper hydroxide)
Dangerous Goods Class ADG Class:	9
Packing Group: ADG, IMDG, IATA	III
Marine pollutant:	Yes
EMS Number:	F-A,S-F
Hazchem Code:	2Z
Special Provisions:	274, 331, 335, 375, AU01
Transport/Additional information:	Not subject to the ADG Code when transported by road or rail in packagings that do not incorporate a receptacle exceeding 500 kg(L) or IBCs. (refer to SP AU01)
Excepted quantities (EQ):	E1
Limited Quantities:	5 kg
Packagings & IBCs - Packing Instruction:	P002, IBC08, LP02
Packagings & IBCs - Special Packing Provisions:	PP12, B3
Portable Tanks & Bulk Containers - Instructions:	T1, BK2, BK3
Portable Tanks & Bulk Containers - Special Provisions:	TP33

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15 Regulatory Information

Australian Inventory of Industrial Chemicals:

All ingredients are listed.

Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Poison Schedule:

Poisons Schedule: 6

Australian Pesticides and Veterinary Medicines Authority:

This active ingredient is registered with the Australian Pesticides and Veterinary Medicines Authority. APVMA approval number 89296.

16 Other Information

Date of Preparation or Last Revision: 15.02.2023**Prepared by:** MSDS.COM.AU Pty Ltdwww.msds.com.au

Abbreviations and acronyms:

ADG: Australian Dangerous Goods

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

IARC: International Agency for Research on Cancer

STEL: Short Term Exposure Limit

TWA: Time Weighted Average

NES: National Exposure Standard (Safe Work Australia - Workplace Exposure Standards For Airborne Contaminants)

Acute Toxicity (Oral) 4: Acute toxicity – Category 4

Acute Toxicity (Inhalation) 2: Acute toxicity – Category 2

Eye Damage 1: Serious eye damage/eye irritation – Category 1

Skin Sensitisation 1B: Skin sensitisation, Hazard Category 1B

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

Aquatic Acute 1: Hazardous to the aquatic environment, short-term (Acute). Category 1

Aquatic Chronic 1: Hazardous to the aquatic environment, long-term (Chronic). Category 1

Disclaimer

This SDS is prepared in accord with the Safe Work Australia document “Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals - July 2020”.

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