

1) IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: VITRA 400WG FUNGICIDE
Other Names: None
Chemical Group: Copper compounds
Recommended Use: Fungicide for use on fruit and vegetables.
Supplier Details: InnoLink Pty Ltd ABN 73 135 421 984
Suite 1, Level 2
George St
PARRAMATTA NSW 2150
Telephone: (02) 9725 2544
Fax: (02) 9604 7768
Email: gderrick@innolink.net.au

Emergency Telephone Number: (02) 9725 2544 – 8am to 6pm Monday to Friday.

2) HAZARDS IDENTIFICATION**HAZARDOUS SUBSTANCE - DANGEROUS GOOD**

Hazardous classification: Hazardous according to the criteria of the National Occupational Health & Safety Commission (NOHSC)

Risk phrases: R20 – Harmful by inhalation.
R22 – Harmful if swallowed.
R50/53 - Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety phrases: See sections 4,5,6,7,8,10,12,13
S2 – Keep out of the reach of children.
S13 – Keep away from food, drink and animal feedstuffs.
S20 – When using do not eat or drink.
S21 – When using do not smoke.
S22 – Do not breathe dust.
S36 – Wear suitable protective clothing.
S37 – Wear suitable gloves.
S45 – In case of accident or if you feel unwell seek medical advice immediately (show the label where possible).

ADG Classification 9

SUSDP classification: 6 (Standard for the Uniform Scheduling of Drugs & Poisons)

3) COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	CAS Number	Concentration
Copper hydroxide	20427-59-2	64.5 – 67.8 %
Inert ingredients	Non hazardous	10-40%

4) FIRST AID MEASURES

If poisoning occurs, immediately contact a doctor or Poison Information Centre (Ph: 13 11 26) and follow the advice given. Show this Material Safety Data Sheet to the doctor.

Inhalation: If symptoms are experienced, remove source of contamination or move victim to fresh air. Obtain medical advice.

Skin Contact: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and footwear. Get medical attention if irritation develops.

Eye contact: Check and remove any contact lenses. Rinse eyes immediately with clean water for at least 15 minutes and seek medical aid if irritation persists.

Ingestion: Check breathing. If necessary use artificial respiration. Keep the patient at rest. Maintain body temperature. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. If patient is unconscious, lay him on his side with the head lower than the rest of the body and semi-flexed knees.

First Aid facilities Ensure eye wash and safety shower are available.

Medical Attention: There is no specific antidote. Treat symptomatically and give supportive therapy. Important symptoms include a burning pain in the mouth and pharynx, nausea, watery and bloody stools, diarrhoea, decrease in blood pressure. Headache and weakness may occur, proceeding to fainting or unconsciousness. Risk of renal and hepatic alterations.

5) FIRE FIGHTING MEASURES

Extinguishing media Use dry chemical or carbon dioxide (CO₂). Do not use water jet from high flow (due to risk of contamination).

Hazard from combustion products Not known.

Precautions for fighting fires Fire fighters should wear suitable protective clothing and dust mask with filter for chemicals. Keep unnecessary people away. If it can be done safely remove intact containers from the fire. Bund area with sand or earth to prevent contamination of drains or waterways. Dispose of extinguishing agent and spillage safely later. Do not release contaminated water into the environment.

Hazchem Code 2X

6) ACCIDENTAL RELEASE MEASURES

Avoid contact with spilled material or contaminated surfaces. Do not smoke, eat or drink during the clean up process. Wear personal protective clothing and equipment as detailed in Section 8 PERSONAL PROTECTION. Keep people and animals away. Contain spill and absorb with earth, sand, clay or other absorbent material. Prevent spilled material from entering drains or watercourses. Collect and store in properly labelled drums for safe disposal. Clean floor with a damp cloth and place it in the drum. Seal drums and label ready for safe disposal. Deal with all spillages immediately. If contamination of drains, streams, watercourses etc is unavoidable warn the local water authority. Do not clean the contaminated area with water. Do not use brushes or compressed air to clean surfaces or clothing.

7) HANDLING AND STORAGE

Handling Keep out of reach of children. Will irritate eyes and skin. Avoid contact with eyes and skin. After use and before eating, drinking or smoking wash hands, arms and face thoroughly with soap and water. After each day's use wash gloves and contaminated clothing.

Storage Store in the closed original container in a cool well ventilated area (<40°C). Do not store for prolonged periods in direct sunlight. Avoid high temperatures and frost. Store in a locked room away from children, animals, food, animal feed, seed and fertilisers. Keep container dry.

Flammability Not flammable.

8) EXPOSURE CONTROL/PERSONAL PROTECTION

Exposure Standards No exposure standards have been assigned for cupric hydroxide. Exposure standard – Time Weighted Average (TWA) means the average airborne concentration of a particular substance when calculated over a normal eight hour working day, for a five-day working week.

Biological Limit Values None allocated

Engineering Controls Use in a well ventilated area only.

Personal Protective Equipment

Eyes:	Safety goggles or face shield with side shields.
Clothing:	Cotton overalls buttoned to the neck and wrists.
Gloves:	Elbow length chemical resistant PVC gloves
Respiratory:	Suitable particulate respiratory equipment in case of insufficient ventilation.

9) PHYSICAL AND CHEMICALS PROPERTIES

Appearance:	Blue granules
Odour:	No odour
Vapour pressure:	No data available.
Vapour density:	No data available.
Boiling point:	No data available.
Freezing/Melting point:	No data available.
pH:	8-10 (20°C)
Solubility:	Practically insoluble.
Relative density:	0.65-0.85 g/cm ³
Flash point:	>61°C
Flammability (explosive) limit:	No data available.
Auto ignition temperature:	>600°C
Partition coefficient (octanol/water):	No data available.

10) STABILITY AND REACTIVITY

Chemical stability:	Stable under normal conditions of use for a minimum period of 2 years.
Conditions to avoid:	Moisture and temperatures above 40°C.
Incompatible materials :	Acids and ammonium salts partly dissolve the product.

10) STABILITY AND REACTIVITY continued

Hazardous decomposition products:	Copper hydroxide decomposes at temperatures over 140°C, producing water and copper oxide. It does not decompose if stored and applied as directed.
Hazardous reactions:	No data available

11) TOXICOLOGICAL INFORMATION

Inhalation:	No data available
Skin contact:	No irritant effect.
Eye contact:	Strong irritant with risk of serious damage to eyes.
Ingestion:	May be harmful.

ANIMAL TOXICITY DATA – PRODUCT

<u>Acute:</u>	
Oral toxicity	LD ₅₀ rat 489-1280mg/kg
Dermal toxicity:	LD ₅₀ rat >2000mg/kg (96 h)
Inhalation toxicity:	LC ₅₀ rat 0.56-0.61 mg/L (4h)
Skin irritation:	No irritant effect.
Eye irritation (rabbit) :	Strong irritant with risk of serious damage to eyes.
Irritation of mucous membranes:	No data available
Sensitisation:	No sensitising effects known.

Chronic:
No data available

12) ECOLOGICAL INFORMATION

Very toxic to aquatic organisms and may cause adverse effects in the aquatic environment. DO NOT contaminate streams, rivers or waterway with Vitra or the used containers.

Ecotoxicity: Aquatic invertebrates : Copper hydroxide technical : $CE_{50}/Daphnia magna/48h = 0.038 \text{ mg/L}$. No other data available.

Environmental fate, persistence and degradability, mobility Copper is strongly absorbed by soils and it does not degrade. Copper does not bioaccumulate. Organisms excrete copper naturally. Copper that is added to the soil mainly becomes bound to organic material. The content of organic material in the soil and the pH determine the degree of copper availability. Through the strong binding to various soil components, the leaching out of copper is extremely low. Mobility in soil towards deeper layers is negligible.

13) DISPOSAL CONSIDERATIONS

Triple or preferable pressure rinse containers before disposal. Add rinsings to the mixing tank. Do not dispose of undiluted chemical on-site. If recycling, replace cap and return clean containers to recycler or designated collection point. If not recycling, break, crush or puncture and bury empty containers in a local authority landfill. If no landfill is available bury the containers below 500mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty containers and product should not be burnt. Waste should not be removed through the sewer.

14) TRANSPORT INFORMATION

UN Number: 3077
Proper Shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (contains copper hydroxide technical)
Class and subsidiary risk: 9
Packing Group: III
H.I no. 90
Hazchem code: 2X
Sea transport – IMDG- Yes
Marine pollution

15) REGULATORY INFORMATION

Registered under the Agricultural and Veterinary Chemicals Act 1988 (Commonwealth) Australian Pesticides and Veterinary Medicines Authority approval number: 65926

16) OTHER INFORMATION

This MSDS summarises our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user should read this MSDS and consider the information in the context of the how the product will be handled and used in the workplace including in conjunction with other products.

If clarification or further information is needed to ensure that an appropriate risk assessment can be made the user should contact this company.

END OF MSDS