

# SAFETY DATA SHEET

**KIWICARE®**

Product Name: Plant Health Copper Fungicide Liquid Concentrate

Print/View Date: 6/07/2020

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## 1. PRODUCT AND COMPANY INFORMATION

<b>Chemical/Product Name:</b>	<b>Plant Health Copper Fungicide Liquid Concentrate</b>
Recommended uses:	Inorganic cuprous fungicide
Restrictions on Use/Supply	The substance must not be applied onto or into water.
Molecular Formula:	Mixture
Supplier:	Kiwicare Corporation Limited
Street Address:	225 Maces Road, Bromley, Christchurch, 8062 New Zealand
Postal Address:	P.O Box 15050, Aranui, Christchurch, 8643 New Zealand
Telephone	+64 3 389 0778
Email:	<a href="mailto:info@kiwicare.co.nz">info@kiwicare.co.nz</a>
Website:	<a href="http://www.kiwicare.co.nz">www.kiwicare.co.nz</a>
Emergency Contact Numbers:	0800 764 766 (0800 POISON)
National Poisons Centre:	0800 764 766 (0800 POISON)

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## 2. HAZARDS IDENTIFICATION

HSNO Hazard Classification	Transport of Dangerous Goods Pictogram	GHS Pictogram	Signal word	Hazard statement code	Precautionary statement codes			
					Prevention	Response	Storage	Disposal
6.1D (oral)	Not applicable for the UN RTDG Model Regulations		Warning	H302	P102 P103 P264 P270	P101 P301+P312 P330	No storage statements	P501
6.1D (dermal)	Not applicable for the UN RTDG Model Regulations		Warning	H312	P102 P103 P280	P101 P302+P352 P312 P322 P363	No storage statements	P501
6.1D (inhalation)	Not applicable for the UN RTDG Model Regulations		Warning	H332	P102 P103 P261 P271	P101 P304+P340 P312	No storage statements	P501
6.3A	Not applicable for the UN RTDG Model Regulations		Warning	H315	P103 P264 P280	P302+P352 P321 P332+P313 P362	No storage statements	P501
6.4A	Not applicable for the UN RTDG Model Regulations		Warning	H319	P103 P264 P280	P305+P351+P338 P337+P313	No storage statements	P501
6.5B	Not applicable for the UN RTDG Model Regulations		Warning	H317	P103 P261 P272 P280	P302+P352 P333+P313 P321 P363	No storage statement	P501
6.9B (single exposure)	Not applicable for the UN RTDG Model Regulations		Warning	H371	P103 P260 P264 P270	P309+P311	P405	P501
6.9B (repeated exposure)	Not applicable for the UN RTDG Model Regulations		Warning	H373	P103 P260	P314	No storage statements	P501
9.1A			Warning	H400	P103 P273	P391	No storage statements	P501

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9.3B	Not applicable for the UN RTDG Model Regulations		No signal word	H432	P103 P2733	P391	No storage statements	P501
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Signal word:

WARNING

Dangerous Goods:

Dangerous Goods (Class 9)

Packaging Group:

III

Hazardous Substance (HSNO) Codes: 6.1D, 6.3A, 6.4A, 6.5B, 6.9B, 9.1A, 9.3B

Pictograms:



Hazard Statement:

H302: May be harmful if swallowed.

H312: May be harmful if in contact with skin.

H315: Causes skin irritation.

H317: May cause an allergic skin reaction.

H320: Causes mild eye irritation.

H373: May cause damage to organs through repeated exposure

H400: Very toxic to aquatic life.

H432: Toxic to terrestrial vertebrates.

Precautionary Statements:

P101: If medical advice is needed, have product container or label at hand.

P102: Keep out of reach of children.

P103: Read label before use.

P260: Do not breathe spray.

P261: Avoid breathing spray.

P264: Wash thoroughly after handling.

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

P272: Contaminated work clothing should not be allowed out of the workplace.

P273: Avoid release to the aquatic environment.

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P280: Wear protective gloves/protective clothing/eye protection/face protection.

P312: Call a POISON CENTER or doctor/physician if you feel unwell.

P322: See Specific measures on product label

P314: Get medical advice/attention if you feel unwell.

P321: Specific treatment on the label.

P330: Rinse mouth

P362: Take off contaminated clothing and wash before re-use.

P363: Wash contaminated clothing before reuse.

P391: Collect spillage.

P301+312: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

P302+352: IF ON SKIN: Wash with plenty of soap and water.

P332+313: If skin irritation occurs: Get medical advice/ attention.

P333+313: If skin irritation or rash occurs: Get medical advice/attention.

P337+313: If eye irritation persists: Get medical advice/attention.

P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P501: In the case of a substance that is in compliance with a HSNO approval other than a Part 6A (Group Standards) approval, a label must provide a description of one or more appropriate and achievable methods for the disposal of a substance in accordance with the Hazardous Substances (Disposal) Regulations 2001. This may also include any method of disposal that must be avoided

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## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Appearance: Greenish blue liquid

### Ingredients

Ingredients	CAS #	Content %
Copper [present as $\text{CuSO}_4 \cdot 3\text{Cu}(\text{OH})_2$ ]	12527-76-3	19%
Propylene Glycol	57-55-6	8%
Other ingredients	NA (Mixture)	to 100 %

## 4. FIRST AID MEASURES

General information: In case of accident, or if you feel unwell, seek medical advice (show the label where possible).

Ingestion: Never give anything by mouth to an unconscious person. If swallowed do NOT

Eye Contact: induce vomiting. For advice, contact the National Poisons Centre (0800 764766). Seek medical assistance immediately.

Skin Contact: Flush eyes with plenty of water for 15 minutes holding eyelids open if necessary. Seek medical assistance. Remove contact lenses, if present and easy to do.

Inhalation: Immediately flush body and clothes with large amounts of water. Remove contaminated clothing and footwear. Wash affected areas with soap and water. If a large area is affected seek medical assistance.

Advice for Medical Doctors: Remove patient to fresh air. Lay down and keep warm and rested. If breathing is shallow or has stopped ensure airway is clear and apply resuscitation. Seek medical assistance immediately.

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## 5. FIRE FIGHTING MEASURES

HAZCHEM code:	3Z
Specific Hazards:	Keep up wind. Do not allow washings to reach sewage or effluent systems.
Suitable Extinguishing Media:	If involved in a fire, the product will not burn. Choose extinguishing media to suit the burning material. Water fog, foam, carbon dioxide or dry chemical. Do not use water in a jet.
Fire Fighting Advice:	Fire fighters should wear full protective gear, including self-contained breathing apparatus (AS/NZS 1715/1716). Dispose of fire control water or other extinguishing agent and spillage safely later.
Hazardous Products of Combustion:	Thermal decomposition products may include: copper oxide, calcium sulphate and water.

## 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency procedures:	Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation.  For personal protection see section 8.
Environmental precautions:	Prevent leakage or spillage if safe to do so.
Minor Spills (Up to 20 kg):	Wear protective clothing. Clear area of unprotected personnel. Contain spill and collect. Do not allow product or washings to enter the waterways or sewer.

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## 6. ACCIDENTAL RELEASE MEASURES

Major Spills (more than 20 kg):

Wear protective clothing. Clear area of unprotected personnel. Contain spill and collect. Do not allow product or washings to enter the waterways or sewer. If spill does enter waterway contact local authority. Contaminated absorbent and wash water should be disposed of according to local and national regulations.

Collect in an appropriate sealable container for disposal in an approved landfill or incinerate at an authorised installation.

## 7. HANDLING AND STORAGE

Precautions for safe handling:

Avoid skin and eye contact and inhalation of spray mist. APPROVED HANDLER: This product must be under the control of an approved handler when it is applied in a wide dispersive manner or used by a commercial contractor. TRACKING: Is not required RECORD KEEPING: Records of use as described in NZS 8409 Management of Agrichemicals must be kept if 3L or more is applied within 24 hours.

Conditions for safe Storage including incompatibilities:

Keep out of reach of children. Store in original container tightly closed and in a locked, dry, cool area away from foodstuffs. Storage must be in accordance with NZS 8409 Management of Agrichemicals. Stores containing 100L of the substance require secondary containment and are subject to signage, and more than 100L require emergency response plans.

Protection against fire and explosion:

Keep away from heat sources although the product has no flammability. The product is not explosive. Keep away from oxidizing agents.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Standards:

See 'Exposure limits' below (Workplace Exposure Standards and Biological Exposure Indices 11<sup>th</sup> edition)

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls:	No special requirements when used as recommended.
Hand protection:	Suitable chemical resistant gloves are recommended for applicants.
Eye protection:	Wear safety glasses or full-face shield if splashes are likely to occur.
Body protection:	When opening the container, preparing spray and using the prepared spray wear safety goggles, waterproof gloves, washable hat, cotton overalls buttoned to the neck and wrist, and boots.
Respiratory Protection:	No special requirement when used as recommended.
General safety and hygiene measures:	Handle in accordance with good hygiene and safety practice. Wearing of closed work clothing is recommended. Minimise contact with the skin, eyes and clothing. Store work clothing separately.
Environmental Exposure Controls:	Minimise release to the environment. For bulk storage, an environmental assessment must be made to ensure compliance with local environmental legislation.

### Exposure Standards:

Substance	Cas #	TWA		STEL	
		ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>
Propylene glycol Vapour and particulates Particulates only	57-55-6	150	474 10		

### Additional NZ EPA controls:

Code	Section of HSNO Act	Control
Use restriction	77A	The substance must not be applied onto or into water.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Greenish-blue liquid
Odour:	No data
Odour Threshold:	No data
pH Value:	7 at 13 g/L
Melting/freezing point:	Crystallisation ca. -3 °C
Boiling point (range):	No data
Flash Point:	No data
Flammability:	Not applicable
Explosive limits:	No data
Vapour pressure:	No data
Vapour density:	No data
Relative density:	1.28 g/mL
Solubility:	Disperses in water
Partition coefficient:	No data
Auto-ignition temperature:	No data
Decomposition temperature:	No data
Viscosity:	No data

## 10. STABILITY AND REACTIVITY

Stability & Chemical reactivity:	Stable under normal conditions of use. Not explosive or oxidising.
Chemical/material Incompatibilities	Avoid contact with strong acids, iron, aluminium and its alloys.
Conditions to be avoid:	Avoid excessive heating

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## 10. STABILITY AND REACTIVITY

Thermal Decomposition: Hazardous products of combustion; see section 5 for details.

## 11. TOXICOLOGICAL INFORMATION

Hazard Classes	6.1D, 6.3A, 6.4A, 6.5B, 6.9B, 9.1A, 9.3B
Acute Toxicity:	Acute oral LD <sub>50</sub> = 2500 mg/kg (rat). Acute dermal LD <sub>50</sub> >2000 mg/kg (rat) Acute inhalation LC <sub>50</sub> (4 hr) >2.6 mg/L (rat)
Aspiration hazard	May cause irritation on inhalation of mist, gas, or vapour
Skin corrosion/irritation:	Repeated or prolonged exposure may cause skin irritation and dermatitis, due to degreasing properties of the product
Serious eye damage/irritation:	May cause eye irritation
Respiratory or skin sensitisation:	May cause skin sensitisation and/or contact dermatitis
Germ cell mutagenicity:	No data available
Carcinogenicity:	IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
Reproductive toxicity:	This product is not expected to cause reproductive or developmental effects.
Specific organ toxicity – single exposure:	No data available
Specific organ toxicity – repeated exposure:	No data available
Narcotic effects:	No data available.

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## 11. TOXICOLOGICAL INFORMATION

Prolonged contact may give rise to some skin diseases especially if small cuts, scratches or abrasions are present or if irritation by contaminated clothing occurs. Elementary hygiene precautions will avoid these risks.

Copper Sulphate: Workers exposed by inhalation have reported irritation of the nose and throat, occasional ulceration of the nasal septum, and inflammation and diffuse fibrosis of the lungs. Humans exposed to high levels in drinking water have experienced abdominal pain, vomiting, diarrhoea, nausea, and a metallic taste in the mouth.

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated

## 12. ECOTOXICITY INFORMATION

Ecological information of substance:	Copper sprays can cause injury to tender foliage or hasten leaf fall. Eco-toxicological data have not been determined specifically for this product. Data below is for the active ingredient unless otherwise stated.  Rainbow trout, LC50 (96 hr) >100 mg/L Water Flea, EC50 (48 hr) 0.72mg/L
Bioaccumulation potential:	BCF <1. Not likely to be Bioaccumulative
Soil Toxicity and degradability:	No soil toxicity. This product does not contain any components considered to be persistent.
Mobility in soil	No data

## 13. DISPOSAL CONSIDERATIONS

Waste treatment – recommendation:	Any appropriate and achievable methods for the disposal of a substance in accordance with the Hazardous Substances (Disposal) Notice 2017.
Container Disposal:	Empty containers can be recycled or sent to landfill after cleaning if in compliance with local and national regulations.  DO NOT reuse containers.
Methods of disposal to avoid	Do not empty down stormwater system

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## 14. TRANSPORT INFORMATION

### Road, Rail; Marine and Air:

UN Number:	3082
UN Dangerous Goods Class:	Class 9
Hazchem Code:	3Z
UN Packaging Group:	III
UN Proper Shipping Name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. - (copper, 19%)
Segregation:	Do not carry this product on a passenger service vehicle. Segregation: Check the latest Land Transport Rule Dangerous Goods Rule 45001 for additional information. Sea transport may require additional segregation. Refer NZS5433 sea segregation for details.

## 15. N.Z. REGULATORY INFORMATION

HSNO approval Number:	HSR100808
HSNO Classifications:	6.1D, 6.3A, 6.4A, 6.5B, 6.9B, 9.1A, 9.3B
HSNO Controls:	Refer to HSR100808
Other Controls	APPROVED HANDLER: This product must be under the control of an approved handler when it is applied in a wide dispersive manner or used by a commercial contractor.  TRACKING: Is not required  RECORD KEEPING: Records of use as described in NZS 8409 Management of Agrichemicals must be kept if 3L or more is applied within 24 hours.

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## 16. OTHER INFORMATION

SDS date of preparation: 03 / 07 / 2020

SDS date of revision: 03 / 07 / 2025

All Safety Data Sheets are subject to review and should not be left longer than five years before and update is obtained.

For further information visit the Kiwicare web site, [www.kiwicare.co.nz](http://www.kiwicare.co.nz), or contact the supplier of the starting material.

The information in this document should be made available to all who may handle the product. For proper and safe use of this product, please refer to the product label.

This information is based on data believed by Kiwicare Corporation Limited to be accurate at the time of writing. It is given in good faith, but no warranty expressed or implied is made as to its accuracy, completeness or otherwise. Every person dealing with the materials referred herein does so at their own risk absolutely and must make independent determinations of suitability and completeness of information from all sources to ensure their proper use.

Attention is drawn to the application and safety instructions set out on the label. This sheet is not a substitute for safety, hazard or application instructions set out on the label. As Kiwicare Corporation Limited and their distributors have no control over storage or use of this product no liability for accident or damage will be accepted.

### Abbreviations:

ADR: European agreement concerning the international carriage of dangerous goods by Road.

CLP: Classification, Labelling and Packaging

IMDG: International Maritime Dangerous Goods

IATA: International Air Transport Association.

ICAO: International Civil Aviation Organisation

RID: Regulations concerning the International carriage of Dangerous goods by rail.

GHS: Global Harmonized System.

EC: European Commission.

TLV: Threshold Limit Value.

TWA: Time Weighted Average.

STEL: Short-Term Exposure Limit.

H Phrase: Hazard phrase.

P Phrase: Precautionary phrase.

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