1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: YATES COPPER OXYCHLORIDE

Recommended Use: General purpose fungicide and bacteriacide suitable for use on fruit, vegetables and ornamentals.

Supplier: Yates New Zealand, a division of DuluxGroup (New Zealand) Pty Ltd
ABN 55 133 404 118
Co. 2355191

Street Address: The Gate Industrial Park,
373 Neilson St, Onehunga
Auckland, New Zealand

Telephone Number: +64 9 636 2800
Facsimile: +64 9 636 2802
Emergency Telephone: 0 800 734 607 (ALL HOURS)

2. HAZARDS IDENTIFICATION

Classified as a Dangerous Good according to NZS 5433:2012 Transport of Dangerous Goods on Land.

Classified as hazardous according to criteria in the HS (Minimum Degrees of Hazard) Regulations 2001.

Subclasses:
Subclass 6.1 Category D - Substances which are acutely toxic.
Subclass 6.4 Category A - Substances that are irritating to the eye.
Subclass 6.5 Category B - Substances that are contact sensitisers.
Subclass 6.9 Category B - Substances that are harmful to human target organs or systems.
Subclass 9.1 Category A - Substances that are very ecotoxic in the aquatic environment.
Subclass 9.3 Category C - Substances that are harmful to terrestrial vertebrates.
Hazard and Precautionary Information:
Signal Word:   Warning.

Hazard Statements:
Harmful if swallowed.   Causes eye irritation.   May cause an allergic skin reaction.   May cause damage to organs through prolonged or repeated exposure.   Very toxic to aquatic life with long lasting effects.   Harmful to terrestrial vertebrates.

Precautionary Statements:
Keep out of reach of children.   Read label before use.   Read Safety Data Sheet before use.   Wash hands, arms and face thoroughly after handling.   Do not eat, drink or smoke when using this product.   Use only outdoors or in a well-ventilated area.   Contaminated work clothing should not be allowed out of the workplace.   Wear protective gloves/protective clothing/eye protection/face protection.   Avoid release to the environment.   IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.   Rinse mouth.   Do NOT induce vomiting.   IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. IF ON SKIN: Wash with plenty of soap and water.   If skin irritation or rash occurs: Get medical advice/attention.   Specific treatment (see First Aid Measures on this Safety Data Sheet). Wash contaminated clothing before re-use.   Get medical advice/attention if you feel unwell. Collect spillage.   Store locked up.   In 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.

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS Number</th>
<th>Proportion</th>
<th>Risk Phrases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper oxychloride</td>
<td>1332-40-7</td>
<td>500 g/kg</td>
<td>R22</td>
</tr>
<tr>
<td>Ingredients determined not to be hazardous</td>
<td>-</td>
<td>to 100%</td>
<td>-</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

For advice, contact a Poisons Information Centre (e.g. phone Australia 131 126; New Zealand 0800 764 766) or a doctor.

Inhalation:
Remove victim from area of exposure - avoid becoming a casualty. Seek medical advice if effects persist.

Skin Contact:
If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water.

Eye Contact:
If in eyes, hold eyelids apart and flush the eye continuously with running water. Continue flushing until advised to stop by a Poisons Information Centre or a doctor, or for at least 15 minutes.

Ingestion:
If swallowed, do NOT induce vomiting. Give a glass of water. Seek immediate medical assistance.

Medical attention and special treatment:
Treat symptomatically.

5. FIRE FIGHTING MEASURES

Hazards from combustion products:
Non-combustible material. Decomposes on heating emitting toxic fumes.
Safety Data Sheet

Precautions for fire fighters and special protective equipment:
Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to products of decomposition.

Suitable Extinguishing Media:
Not combustible, however, if material is involved in a fire use: Media applicable to surrounding fire.

Hazchem Code: 2Z

6. ACCIDENTAL RELEASE MEASURES

Emergency procedures:
If contamination of sewers or waterways has occurred advise local emergency services.

Methods and materials for containment and clean up:
Wear protective equipment to prevent skin and eye contact and breathing in dust. Contain - prevent run off into drains and waterways. Collect and seal in properly labelled containers.

7. HANDLING AND STORAGE

Precautions for safe handling: Keep out of reach of children. Avoid skin and eye contact and breathing in vapour, mists and aerosols.

Conditions for safe storage: Store in the closed, original container in a dry, cool, well-ventilated area out of direct sunlight. Store away from foodstuffs. Keep containers closed when not in use - check regularly for spills.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits: No value assigned for this specific material by the New Zealand Occupational Safety and Health Service (OSH). However, Workplace Exposure Standard(s) for constituent(s):

Copper dusts & mists, as Cu: WES-TWA 1 mg/m³

As published by the New Zealand Occupational Safety and Health Service (OSH).

WES - TWA (Workplace Exposure Standard - Time Weighted Average) - The eight-hour, time-weighted average exposure standard is designed to protect the worker from the effects of long-term exposure.

These Exposure Standards are guides 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 fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

Engineering controls:
Natural ventilation should be adequate under normal use conditions. Keep containers closed when not in use.

Personal Protective Equipment:
Avoid contact with eyes and skin and breathing in spray mist. Wear gloves and eye protection when mixing or using. Wash hands and exposed skin thoroughly after use.
9. PHYSICAL AND CHEMICAL PROPERTIES

- Physical state: Powder
- Colour: Blue - Green
- Odour: Odourless
- Solubility: Dispersible in water.
- Specific Gravity: Not available
- Relative Vapour Density (air=1): Not applicable
- Vapour Pressure (20 °C): Not applicable
- Flash Point (°C): Not applicable
- Melting Point/Range (°C): Not available
- Decomposition Point (°C): 220 approx.
- pH: 6-9.5
- Evaporation Rate: Not applicable

10. STABILITY AND REACTIVITY

- Chemical stability: Stable under normal conditions of use.
- Conditions to avoid: Avoid contact with foodstuffs.
- Incompatible materials: None known.
- Hazardous decomposition products: Copper oxide.
- Hazardous reactions: None known.

11. TOXICOLOGICAL INFORMATION

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

**Ingestion:** Swallowing can result in nausea, vomiting, diarrhoea, and abdominal pain.

**Eye contact:** An eye irritant.

**Skin contact:** Contact with skin may result in irritation. May cause skin sensitisation in sensitive individuals. Repeated or prolonged skin contact may lead to allergic contact dermatitis.

**Inhalation:** Breathing in dust may result in respiratory irritation.

**Long Term Effects:** Evidence indicates that repeated or prolonged exposure to this chemical could result in effects on the gastrointestinal system, and liver.

**Toxicological Data:** No LD50 data available for the product. However, for COPPER OXYCHLORIDE: (1):
- Oral LD50 (rat): 700-800 mg/kg
- Dermal LD50 (rabbit): >2000 mg/kg

12. ECOLOGICAL INFORMATION
12. ECOLOGICAL INFORMATION

Ecotoxicity
Avoid contaminating waterways and fishponds. Do not allow spray to drift onto aquatic environments, other crops or desirable plants or outside the target area. Keep children, pets, wildlife and birds off treated areas until the spray is dry. For COPPER OXYCHLORIDE:

Aquatic toxicity:
Toxic to aquatic organisms.
48hr LC50 (fish): 2.2 mg/L (carp) (1)
Terrestrial toxicity:
Harmful to terrestrial species.

13. DISPOSAL CONSIDERATIONS

Disposal methods:
Refer to local government authority for disposal recommendations. Rinse empty container, puncture and recycle or dispose of safely with domestic rubbish.

14. TRANSPORT INFORMATION

Road and Rail Transport
Classified as a Dangerous Good according to NZS 5433:2012 Transport of Dangerous Goods on Land.

Marine Transport
Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea; DANGEROUS GOODS.
This material is classified as a Marine Pollutant (P) according to the International Maritime Dangerous Goods Code.

Air Transport
Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air; DANGEROUS GOODS.

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Product Name: YATES COPPER OXYCHLORIDE
Substance No: 000000020767
Issued: 31/01/2012
Version: 3
15. REGULATORY INFORMATION

Classification:
Classified as hazardous according to criteria in the HS (Minimum Degrees of Hazard) Regulations 2001.

Subclasses:
- Subclass 6.1 Category D - Substances which are acutely toxic.
- Subclass 6.4 Category A - Substances that are irritating to the eye.
- Subclass 6.5 Category B - Substances that are contact sensitisers.
- Subclass 6.9 Category B - Substances that are harmful to human target organs or systems.
- Subclass 9.1 Category A - Substances that are very ecotoxic in the aquatic environment.
- Subclass 9.3 Category C - Substances that are harmful to terrestrial vertebrates.

16. OTHER INFORMATION


Reason(s) for Issue:
- 5 Yearly Revised Primary SDS
- Alignment to HSNO requirements

This safety data sheet has been prepared by SDS Services.
This SDS summarises to our best knowledge at the date of issue, the chemical health and safety hazards of the material and general guidance on how to safely handle the material in the workplace. Since DuluxGroup Limited cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, assess and control the risks arising from its use of the material.

If clarification or further information is needed, the user should contact their DuluxGroup representative or DuluxGroup Limited at the contact details on page 1.

DuluxGroup Limited's responsibility for the material as sold is subject to the terms and conditions of sale, a copy of which is available upon request.