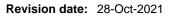
SAFETY DATA SHEET





Revision Number 2

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

| Product identifier | |
|-------------------------------|---|
| Product Name | Echo 500 SC Fungicide |
| Product Code(s) | 00000063132 |
| Other means of identification | |
| UN number | 3082 |
| Recommended use of the chemic | al and restrictions on use |
| Recommended use | Agricultural fungicide for use as described on the product label. |
| Uses advised against | No information available. |
| Supplier | |

Supplier Sipcam Pacific Australia Pty. Ltd. ABN: 94 073 176 888 Street Address: Level 1, 191 Malop Street Geelong, Victoria, 3220 Australia

Telephone Number: +61 (0) 3 5223 3746 (business hours) Facsimile: +61 (0) 3 5223 3756 Website: www.sipcam.com.au

Emergency telephone number

Emergency telephone number

^{ber} 1 800 033 111 (ALL HOURS)

Please ensure you refer to the limitations of this Safety Data Sheet as set out in the "Other Information" section at the end of this Data Sheet.

2. HAZARDS IDENTIFICATION

GHS Classification

Classified as a hazardous chemical in accordance with the criteria of Safe Work Australia - Globally Harmonized System (GHS).

Classified as dangerous goods in accordance with the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG).

Environmentally Hazardous Substances meeting the descriptions of UN 3077 or UN 3082 are not subject to the provisions of the Australian Code for the Transport of Dangerous Goods by Road and Rail when transported by road or rail in: packagings that do not incorporate a receptacle exceeding 500 kg(L); or IBCs.

| Acute toxicity - Inhalation (Dusts/Mists) | Category 2 |
|---|------------|
| Serious eye damage/eye irritation | Category 1 |
| Skin sensitization | Category 1 |

| Carcinogenicity | Category 2 |
|--|------------|
| Specific target organ toxicity (single exposure) | Category 3 |
| Acute aquatic toxicity | Category 1 |
| Chronic aquatic toxicity | Category 1 |

SIGNAL WORD Danger

Label elements

Skull and crossbones Corrosion Health hazard Environment



Hazard statements

H330 - Fatal if inhaled

- H335 May cause respiratory irritation
- H318 Causes serious eye damage

H317 - May cause an allergic skin reaction

H351 - Suspected of causing cancer

H410 - Very toxic to aquatic life with long lasting effects

Precautionary Statements - Prevention

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Do not breathe fume, gas, mist, vapours, spray

Use only outdoors or in a well-ventilated area

In case of inadequate ventilation wear respiratory protection

Wear protective gloves / protective clothing / eve protection / face protection

Contaminated work clothing should not be allowed out of the workplace

Avoid release to the environment

Precautionary Statements - Response

IF exposed: Specific treatment is urgent (see First aid on this SDS)

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing Immediately call a POISON CENTER or doctor

IF ON SKIN: Wash with plenty of soap and water

If skin irritation or rash occurs: Get medical advice/attention

Take off contaminated clothing and wash before reuse

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

Immediately call a POISON CENTER or doctor

In case of fire: Use extinguishing media as outlined in Section 5 of this Safety Data Sheet for extinction.

Collect spillage

Precautionary Statements - Storage

Store in a well-ventilated place. Keep container tightly closed

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable

Other hazards which do not result in classification 6

Poisons Schedule (SUSMP)

3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical name | CAS No. | Weight-% |
|--------------------------------|-----------|----------|
| Chlorothalonil | 1897-45-6 | 500 g/L |
| Other non-hazardous components | - | 100 g/L |
| Water | 7732-18-5 | to 100% |

4. FIRST AID MEASURES

Description of first aid measures

| General advice | Take a copy of the Safety Data Sheet when going for medical treatment. | |
|--|---|--|
| Emergency telephone number | Poisons Information Center, Australia: 13 11 26 Poisons Information Center, New Zealand: 0800 764 766 | |
| Inhalation | Remove to fresh air and keep at rest in a position comfortable for breathing. Seek immediate medical attention/advice. If breathing is difficult, (trained personnel should) give oxygen. If breathing has stopped, give artificial respiration. Get medical attention immediately. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. | |
| Eye contact | In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Seek immediate medical attention/advice. | |
| Skin contact | May cause an allergic skin reaction. Wash off immediately with soap and plenty of water for at least 15 minutes. Allergic symptoms may be delayed. In the case of skin irritation or allergic reactions see a physician. | |
| Ingestion | Clean mouth with water and drink afterwards plenty of water. Do NOT induce vomiting. Call a physician immediately. If victim has breathing difficulties treat as for "Inhalation". | |
| Self-protection of the first aider | Avoid contact with skin, eyes, and clothing. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Wear personal protective clothing (see section 8). | |
| Most important symptoms and effects, both acute and delayed | | |
| Symptoms | Asthma-like and/ or skin allergy-like symptoms. | |
| Indication of any immediate medical attention and special treatment needed | | |
| Note to physicians | Treat symptomatically. | |

| 5. FIRE FIGHTING MEASURES | | |
|--------------------------------|--|--|
| Suitable Extinguishing Media | | |
| Suitable Extinguishing Media | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Water spray or fog is preferred; if water not available use dry chemical, CO2 or regular foam. | |
| Unsuitable extinguishing media | No information available. | |

| Specific hazards arising from the chemical | | |
|---|---|--|
| Specific hazards arising from the chemical | Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes. Do not allow run-off from fire-fighting to enter drains or water courses. | |
| Hazardous combustion products | Carbon oxides. Nitrogen oxides. Hydrogen chloride. Hydrogen cyanide. | |
| Special protective actions for fire-fighters | | |
| Special protective equipment for fire-fighters | Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment. | |
| Hazchem code | 2X | |
| 6. ACCIDENTAL RELEASE MEASURES | | |
| Personal precautions, protective equipment and emergency procedures | | |
| Personal precautions | Ensure adequate ventilation. Do not get in eyes, on skin, or on clothing. Evacuate personnel to safe areas. Use personal protective equipment as required. Wash thoroughly after handling. | |

For emergency responders Use personal protection recommended in Section 8. Wear respiratory protection. Clear area of all unprotected personnel.

Environmental precautions

Environmental precautions Prevent further leakage or spillage if safe to do so. Keep out of drains, sewers, ditches and waterways. Local authorities should be advised if significant spillages cannot be contained. See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

 Methods for containment
 Prevent further leakage or spillage if safe to do so. Do not touch or walk through spilled material. Keep out of drains, sewers, ditches and waterways. Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see Section 13).

Methods for cleaning up Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Dike to collect large liquid spills. Avoid breathing dust or spray mist. Use personal protective equipment as required. After cleaning, flush away traces with water. Prevent product and washings from entering drains, sewers or surface water due to high toxicity to aquatic organisms.

7. HANDLING AND STORAGE

Precautions for safe handling

| Advice on safe handling | Handle in accordance with good industrial hygiene and safety practice. Ensure adequate ventilation. |
|--------------------------------|--|
| General hygiene considerations | Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Wash hands and face before breaks and immediately after handling the product. |

Conditions for safe storage, including any incompatibilities

| Storage Conditions | Keep containers tightly closed in a cool, well-ventilated place. |
|--------------------------|--|
| | This material is a Scheduled Poison and must be stored, maintained and used in accordance with the relevant regulations. |
| Incompatible materials | None known based on information supplied. |
| Poisons Schedule (SUSMP) | 6 |

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Limits

No value assigned for this specific material by Safe Work Australia.

Appropriate engineering controls

Engineering controls Apply technical measures to comply with the occupational exposure limits.

If in the handling and application of this material, safe exposure levels could be exceeded, the use of engineering controls such as local exhaust ventilation must be considered and the results documented. If achieving safe exposure levels does not require engineering controls, then a detailed and documented risk assessment using the relevant Personal Protective Equipment (PPE) (refer to PPE section below) as a basis must be carried out to determine the minimum PPE requirements.

Individual protection measures, such as personal protective equipment

The selection of PPE is dependent on a detailed risk assessment. The risk assessment should consider the work situation, the physical form of the chemical, the handling methods, and environmental factors.

OVERALLS, SAFETY SHOES, SAFETY GLASSES, GLOVES.

| Eye/face protection | Wear safety glasses with side shields (or goggles). |
|---------------------------------|---|
| Skin and body protection | Wear suitable protective clothing. |
| Hand protection | Impervious gloves. |
| Respiratory protection | No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required. If determined by a risk assessment an inhalation risk exists, wear a suitable mist respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716. |
| Environmental exposure controls | Do not allow into any sewer, on the ground or into any body of water. Local authorities should be advised if significant spillages cannot be contained. |

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

| information on pasic physical and t | | |
|-------------------------------------|---------------------------|------------------|
| Physical state | Liquid | |
| Appearance | Viscous | |
| Color | Whitish | |
| Odor | Slight Pungent | |
| Odor threshold | No information available. | |
| | | |
| Property_ | Values | Remarks • Method |
| pH | 6.5 - 8.5 | |
| pH (as aqueous solution) | No data available | None known |
| Melting point / freezing point | Approx 0°C | |
| Boiling point / boiling range | Approx 100°C | |
| Flash point | No data available | None known |
| Evaporation rate | No data available | None known |
| Flammability (solid, gas) | No data available | None known |
| Flammability Limit in Air | | None known |
| Upper flammability or explosive | No data available | |
| limits | | |
| Lower flammability or explosive | No data available | |
| limits | | |
| Vapor pressure | No data available | None known |
| Vapor density | No data available | None known |
| Relative density | 1.24 | |
| Water solubility | Dispersible | |
| Solubility(ies) | No data available | None known |
| Partition coefficient | No data available | None known |
| Autoignition temperature | No data available | None known |
| Decomposition temperature | No data available | None known |
| Kinematic viscosity | No data available | None known |
| Dynamic viscosity | No data available | None known |
| | | |

Other information

10. STABILITY AND REACTIVITY

| Reactivity | | |
|--|---|--|
| Reactivity | Non-reactive under normal conditions of use, storage and transport. | |
| Chemical stability | | |
| Stability | Stable under normal conditions. | |
| Explosion data Sensitivity to mechanical impact None. | | |
| Sensitivity to static discharge | None. | |
| Possibility of hazardous reactions | | |
| Possibility of hazardous reactions | None under normal processing. | |
| Hazardous polymerization | Hazardous polymerization does not occur. | |
| Conditions to avoid | | |

Conditions to avoid

None known based on information supplied.

Incompatible materials

Incompatible materials None known based on information supplied.

Hazardous decomposition products

Hazardous decomposition products Carbon oxides. Nitrogen oxides. Hydrogen chloride. Hydrogen cyanide.

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Information on likely routes of exposure

| Product Information | No adverse health effects expected if the chemical is handled in accordance with this Safety Data Sheet and the chemical label. Symptoms or effects that may arise if the chemical is mishandled and overexposure occurs are: |
|---------------------|---|
| Inhalation | May cause irritation of respiratory tract. May be fatal if inhaled. |
| Eye contact | Causes serious eye damage. |
| Skin contact | May cause irritation. May cause sensitization by skin contact. |
| Ingestion | Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea. |
| Symptoms | May cause allergic skin reaction. |

Numerical measures of toxicity - Product Information

No information available.

Numerical measures of toxicity - Component Information

| Chemical name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|----------------|--|---|---|
| Chlorothalonil | = 10 g/kg (Rat) > 10000 mg/kg (Rat) | > 10 g/kg (Rabbit)> 2500 mg/kg (Rat) | = 0.1 mg/L (Rat)4 h = 0.31 mg/L (Rat)1 h |
| Water | > 90 mL/kg (Rat) | - | - |

See section 16 for terms and abbreviations

Delayed and immediate effects as well as chronic effects from short and long-term exposure

| Skin corrosion/irritation | Not classified. Classification based on data available for ingredients. | |
|--|--|--|
| Serious eye damage/eye irritation | Causes serious eye damage. Classification based on data available for ingredients. | |
| Respiratory or skin sensitization | May cause sensitization by skin contact. Classification based on data available for ingredients. | |
| Germ cell mutagenicity | No information available. | |
| Carcinogenicity | | |
| The table below indicates whether each agency has listed any ingredient as a carcinogen. | | |

| Chlorothalonil - 1897-45-6 | | Carc. 2 | |
|----------------------------|-----------------------------------|---------|--|
| Reproductive toxicity | No information available. | | |
| STOT - single exposure | May cause respiratory irritation. | | |
| STOT - repeated exposure | No information available. | | |
| Aspiration hazard | No information available. | | |

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity

Toxic to aquatic life with long lasting effects.

| Chemical name | Algae/aquatic plants | Fish | Toxicity to | Crustacea |
|----------------|-----------------------|-------------------------|----------------|-------------------------|
| | | | microorganisms | |
| Chlorothalonil | EC50: =0.57mg/L (72h, | LC50: =0.012mg/L (96h, | - | EC50: 0.0342 - |
| | Desmodesmus | Oncorhynchus mykiss) | | 0.143mg/L (48h, Daphnia |
| | subspicatus) EC50: | LC50: =0.0076mg/L (96h, | | magna) |
| | =0.0068mg/L (72h, | Oncorhynchus mykiss) | | |
| | Pseudokirchneriella | LC50: 0.0221 - | | |
| | subcapitata) | 0.032mg/L (96h, Lepomis | | |
| | | macrochirus) LC50: | | |
| | | 0.045 - 0.057mg/L (96h, | | |
| | | Lepomis macrochirus) | | |

Persistence and degradability

Persistence and degradability Not readily biodegradable.

Bioaccumulative potential

Bioaccumulation

For the major component: This chemical shows a low bioaccumulation potential.

Component Information

| Chemical name | Partition coefficient |
|----------------|-----------------------|
| Chlorothalonil | 2.9 |

Mobility

Mobility in soil

No information available.

Other adverse effects

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

| Waste from residues/unused products | Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation. |
|--|---|
| Contaminated packaging | Dispose of contents/containers in accordance with local regulations. |

14. TRANSPORT INFORMATION

<u>ADG</u>

Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for Transport by Road and Rail; DANGEROUS GOODS.

| UN number | 3082 |
|----------------------|---|
| Proper shipping name | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS |
| | CHLOROTHALONIL) |
| Hazard class | 9 |
| Packing group | |
| Environmental hazard | Yes |
| Hazchem code | 2X |
| | |

<u>IATA</u>

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

| UN number UN proper shipping name | 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS CHLOROTHALONIL) |
|--------------------------------------|--|
| Transport hazard class(es) | 9 |
| Packing group | III |

IMDG

Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea; DANGEROUS GOODS.

| UN number UN proper shipping name | 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS CHLOROTHALONIL) |
|--------------------------------------|--|
| Transport hazard class(es) | 9 |
| Packing group | III |

15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

National regulations

Australia

Classified as a hazardous chemical in accordance with the criteria of Safe Work Australia - Globally Harmonized System (GHS).

Classified as dangerous goods in accordance with the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG).

Environmentally Hazardous Substances meeting the descriptions of UN 3077 or UN 3082 are not subject to the provisions of the Australian Code for the Transport of Dangerous Goods by Road and Rail when transported by road or rail in: packagings that do not incorporate a receptacle exceeding 500 kg(L); or IBCs.

See section 8 for national exposure control parameters

Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP)

Classified as a scheduled poison according to the Standard for Uniform Scheduling of Medicines and Poisons (SUSMP) **Poisons Schedule (SUSMP)** 6

International Inventories AIIC

All the constituents of this material are listed on the Australian Inventory of Industrial Chemicals.

Legend:

- Australian Inventory of Industrial Chemicals

International Regulations

The Montreal Protocol on Substances that Deplete the Ozone Layer Not applicable

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

16. OTHER INFORMATION

Supplier Safety Data Sheet 11/2016

Reason(s) For Issue: 5 Yearly Revised Primary SDS

Issuing Date: 28-Oct-2021

This Safety Data Sheet has been prepared by Ixom Operations Pty Ltd (Toxicology and SDS Services).

Revision Note:

The symbol (*) in the margin of this SDS indicates that this line has been revised.

Key or legend to abbreviations and acronyms used in the safety data sheet

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

| TWA | TWA (time-weighted average) | STEL | STEL (Short Term Exposure Limit) |
|---------|-----------------------------|------|----------------------------------|
| Ceiling | Maximum limit value | * | Skin designation |
| С | Carcinogen | | |

Key literature references and sources for data used to compile the SDS

EPA (Environmental Protection Agency) Acute Exposure Guideline Level(s) (AEGL(s)) U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act U.S. Environmental Protection Agency High Production Volume Chemicals Food Research Journal Hazardous Substance Database International Uniform Chemical Information Database (IUCLID) Japan GHS Classification Australian Industrial Chemicals Introduction Scheme (AICIS) NIOSH (National Institute for Occupational Safety and Health) National Library of Medicine's ChemID Plus (NLM CIP) National Library of Medicine's PubMed database (NLM PUBMED) National Toxicology Program (NTP) New Zealand's Chemical Classification and Information Database (CCID) Organization for Economic Co-operation and Development Environment, Health, and Safety Publications Organization for Economic Co-operation and Development High Production Volume Chemicals Program Organization for Economic Co-operation and Development Screening Information Data Set RTECS (Registry of Toxic Effects of Chemical Substances) World Health Organization

Disclaimer

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 Sipcam Pacific Australia Pty Ltd 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 Sipcam representative or Sipcam Pacific Australia Pty Ltd at the contact details on page 1.

Sipcam Pacific Australia Pty Ltd's responsibility for the material as sold is subject to the terms and conditions of sale, a copy of which is available upon request.

End of Safety Data Sheet