

# SAFETY DATA SHEET

## Manzate Evolution Fungicide®

Date of Issue: 2nd July 2020

### 1. SUBSTANCE/PREPARATION AND COMPANY IDENTIFICATION

|  |  |
|--|--|
| Chemical name of active ingredient(s): | Mancozeb   |
| Recommended use:                       | Fungicide  |
| Supplier:                              | UPL New Zealand Limited<br>PO Box 51584, Pakuranga<br>Auckland<br>Phone 0800 100 325 |
| Emergency telephone number:            | 0800 Poison (0800 764 766) 24 Hours  |

### 2. HAZARDS IDENTIFICATION

Hazard Classification: 6.3B, 6.4A, 6.5B, 6.9B, 9.1A



**Required identification Details:**

**Signal Word: WARNING**

May cause skin and eye irritation.  
May cause sensitisation from prolonged skin contact.  
May cause lung and liver damage from repeated oral exposure at high doses.  
Very toxic to the aquatic environment.

**Precautionary Statements**

**Prevention**

P201 Obtain special instruction before use.  
P280 Do not handle until all safety precautions have been read and understood  
P273 Avoid release to the environment.

**Response**

P308+P313 IF exposed or concerned: Get medical advice/attention  
P391 Collect spillage.

**Storage**  
P405 Store locked up

**Prevention**  
P501 Dispose of contents/container to an approved waste disposal plant.

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### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### Substance/preparation Information on hazardous ingredients

| Common name | CAS No    | %  |
|-------------|-----------|----|
| Mancozeb    | 8018-01-7 | 75 |

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### 4. FIRST-AID MEASURES

#### Description of necessary first aid measures

#### Effects and symptoms

**Inhalation:** IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Give artificial respiration if victim is not breathing. If signs/symptoms continue, get medical attention.

**Ingestion:** Rinse mouth. Never give anything by mouth to an unconscious person. Do not induce vomiting unless told by physician. If vomiting occurs ensure patient can breathe. Get medical attention.

**Skin contact:** Wash off immediately with plenty of water for at least 15 minutes. Get medical attention immediately if symptoms occur.

**Eye contact:** Hold eye open and rinse slowly and gently with water for 15 - 20 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a poison centre or doctor for treatment advice.

**Notes to a physician:** Treat symptomatically and supportively.

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### 5. FIRE-FIGHTING MEASURES

**Extinguishing media:** Water spray. Foam. Carbon dioxide. Dry chemical.

**Hazardous thermal (de)composition products:** Thermal decomposition can lead to release of irritating gases and vapours. Keep product and empty container away from heat and sources of ignition. Hazardous decomposition products formed under fire conditions: Carbon oxides, Nitrogen oxides (NO<sub>x</sub>), Oxides of sulfur, Carbon disulphide, Hydrogen sulphide, Ethylenethiourea 2Z

**HAZCHEM Code:** 2Z

**Protection of fire-fighters:** Wear SCBA and protective suit. Use standard firefighting procedures and consider the hazards of involved material.

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### 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions:** Avoid contact with skin and eyes. Avoid dust formation. Remove all sources of ignition. Provide adequate ventilation. Wash thoroughly after handling. Wear protective gloves/protective clothing and eye/face protection.

|                                   |  |
|-----------------------------------|--|
| <b>Environmental precautions:</b> | Contain spill, do not allow material to enter sewers or bodies of water. Keep unprotected persons and animals out of the area. |
| <b>Methods for cleaning up:</b>   | Avoid dust formation. Take up mechanically and collect in suitable container for disposal. Remove all ignition sources.        |

## 7. HANDLING AND STORAGE

|                                |  |
|--------------------------------|--|
| <b>Handling:</b>               | Avoid dust formation. Avoid contact with skin and eyes. Provide adequate ventilation. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Keep out of reach of children. |
| <b>Storage:</b>                | Store locked up. Keep in a dry, cool and well-ventilated place. Keep out of the reach of children  |
| <b>Incompatible materials:</b> | Alkaline, Strong acids, Strong oxidizing agents, Quaternary ammonium salts, Sequestering agents  |

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Workplace Exposure Guidelines

**Exposure Standards:** Not established.

### Engineering measures

**Exposure control measures:** Ensure adequate ventilation, especially in confined areas. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

### Personal Protective Equipment

**Detail specifications for equipment:**

|                            |   |
|----------------------------|---|
| <b>Respiratory system:</b> | Wear respiratory protection if ventilation is inadequate.   |
| <b>Skin and body:</b>      | Wear suitable long-sleeved clothing.  |
| <b>Hands:</b>              | Wear suitable protective gloves.  |
| <b>Eyes:</b>               | Wear face shield or goggles.  |
| <b>General hygiene:</b>    | After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water.<br>After each day's use, wash contaminated clothing and safety equipment. |

## 9. PHYSICAL AND CHEMICAL PROPERTIES

|  |                                     |
|--|-------------------------------------|
| <b>Physical State:</b>                               | Powder                              |
| <b>Colour:</b>                                       | Yellowish-green                     |
| <b>Odour:</b>  | Odourless                           |
| <b>pH:</b>   | 6.5 – 7.5                           |
| <b>Vapour Pressure:</b>                              | <5.6 x 10 <sup>-7</sup> hPa at 25°C |
| <b>Boiling Point:</b>                                | Not available                       |
| <b>Freezing/melting point:</b>                       | Not available                       |
| <b>Solubility:</b>                                   | Negligible                          |
| <b>Specific gravity or density:</b>                  | 0.65 kg/L                           |
| <b>Information for flammable material including:</b> | Not flammable.                      |
| <b>Flashpoint:</b>                                   | Not applicable                      |
| <b>Octanol/water partition coefficient:</b>          | Not available                       |

## 10. STABILITY AND REACTIVITY

|  |   |
|--|---|
| <b>Stability:</b>                        | This product is unlikely to react or decompose under normal storage conditions.   |
| <b>Conditions to avoid:</b>              | Do not store near strong acids, Keep away from children. Keep away from heat and sources of ignition. Avoid dust formation. |
| <b>Materials to avoid:</b>               | Alkaline, Strong acids, Strong oxidizing agents, Quaternary ammonium salts, Sequestering agents.                            |
| <b>Hazardous Decomposition Products:</b> | Carbon oxides, Nitrogen oxides (NOx), Oxides of sulfur, Carbon disulphide, Hydrogen sulphide, Ethylenethiourea              |
| <b>Hazardous polymerization:</b>         | This product will not undergo polymerisation reactions.   |

## 11. TOXICOLOGICAL INFORMATION

|   |   |
|---|---|
| <b>Acute toxicity – Oral: LD<sub>50</sub></b>       | >2,000 mg/kg  |
| <b>Acute toxicity - Dermal: LD<sub>50</sub></b>     | >2,000 mg/kg  |
| <b>Acute toxicity – Inhalation: LC<sub>50</sub></b> | 3.13 mg/L (maximum breathing zone concentration – no mortality)                           |
| <b>Skin irritation:</b>                             | No skin irritation  |
| <b>Eye irritation:</b>                              | No eye irritation   |
| <b>Sensitization:</b>                               | Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. |
| <b>Chronic toxicity</b>                             | Suspected of damaging the unborn child.   |
| <b>Other information:</b>                           |   |

## 12. ECOLOGICAL INFORMATION

No data available for this product. Values are for a similar product.

|                                 |  |
|---------------------------------|--|
| <b>Aquatic</b>                  | LC <sub>50</sub> : 8.9 mg/L (96hr, Poecilia reticulata)<br>LC <sub>50</sub> : 0.18 mg/L (48hr, Daphnia magna)<br>EC <sub>50</sub> : 7.76 ug/L (72hr, Chlorella vulgaris) |
| <b>Bioaccumulation</b>          | Does not bioaccumulate (Log Pow 1.38)  |
| <b>Degradability</b>            | No data  |
| <b>Soil</b>                     | No evidence of soil toxicity   |
| <b>Terrestrial vertebrate</b>   | No evidence of toxicity towards terrestrial vertebrates  |
| <b>Terrestrial invertebrate</b> | No evidence of toxicity towards terrestrial invertebrates  |

## 13. DISPOSAL CONSIDERATIONS

|                             |   |
|-----------------------------|---|
| <b>Methods of disposal:</b> | Avoid contamination of any waterway with chemical or empty container.   |
| <b>Product:</b>             | Ideally, the product should be used for its intended purpose. If there is a need to dispose of the product, follow the recommendations in NZS 8409. |
| <b>Empty Container:</b>     | Triple rinse container and bury in a suitable landfill.   |

## 14. TRANSPORT INFORMATION - International transport regulations

|                              |  |
|------------------------------|--|
| <b>UN number:</b>            | <b>3077</b>  |
| <b>Class or Division:</b>    | 9  |
| <b>Packing Group:</b>        | III  |
| <b>Marine Pollutant:</b>     | Yes  |
| <b>Proper shipping name:</b> | Environmentally hazardous substance, solid, N.O.S (Mancozeb) |

**15. REGULATORY INFORMATION**

ACVM Registered Number: P007514  
HSNO Approval Code: HSR000808

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**16. OTHER INFORMATION**

Additional information: Original Issue Date: 22 November 2011  
Revision Date: 2<sup>nd</sup> July 2020  
Replaces: ES520

***Disclaimer EXCLUSION OF LIABILITY: PLEASE READ***

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