

SAFETY DATA SHEET



SUPERMANZ™

Date of Issue: December 2010

1. SUBSTANCE/PREPARATION AND COMPANY IDENTIFICATION

Chemical name of active ingredient(s): Mancozeb 455 SC
Recommended use: Agricultural/horticultural fungicide

Supplier: Etec Crop Solutions Ltd
31 Tamaki Bay Drive
Pakuranga
Auckland

Emergency telephone number: 0800 Poison (0800 764 766) 24 Hours

2. HAZARDS IDENTIFICATION

Hazard Classification: Toxic 6.4A, 6.5A, 6.5B, 6.9B
Ecotoxic 9.1A

Required identification Details: Eye and skin irritant. May cause sensitization by inhalation or skin contact.
Harmful to human target organs or systems.
Very toxic to aquatic organisms.
Ingestion: Based on animal studies, long-term exposure to mancozeb may cause abnormal thyroid function.
Chronic:
Inhalation – The effects in animals from repeated high doses (150-250 times the AEL) included reduced bodyweight, inflammation of the lungs and abnormal thyroid function.
Ingestion – Toxic effects in animals from repeated ingestion of high doses included reduced bodyweight, and thyroid effects.
This compound is considered to show weak carcinogenic activity.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/preparation Information on hazardous ingredients		
Common name	CAS No	%
Mancozeb	8018-01-7	45
Inert Ingredients		55

4. FIRST-AID MEASURES

Description of necessary first aid measures:

Effects and symptoms

First-aid measures

Inhalation:

Irritating to skin and eyes. May be harmful if swallowed
Remove to fresh air. Apply artificial respiration if necessary. Get medical help if breathing difficulty persists

Ingestion:

Do not induce vomiting. Give a glass or two of water. Get medical help. Never give anything by mouth to an unconscious person.

Skin contact:

Remove contaminated clothing. Wash with soap and water. If irritation persists see a doctor.

Eye contact:

Immediately flush with water for 15 minutes. If irritation persists see a doctor

Notes to a physician:

Workplace facilities:

Required Instructions:

5. FIRE-FIGHTING MEASURES

HAZCHEM Code:

HAZCHEM 2X

Extinguishing media :

CALL FIRE SERVICE ON 111 informing them of the UN No
Fog, dry chemical powder, CO₂, Alcohol or polymer foam, water spray

Hazardous thermal (de)composition products:

Hydrogen sulphide, carbon disulphide and oxides of carbon, nitrogen and sulphur.

Protection of fire-fighters:

Wear full protective clothing and self contained breathing apparatus. Do not breath smoke or gases.
Run-off from fire control may be apollution hazard.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions:

Eliminate all sources of ignition. Do not create dust. Use appropriate Personal Protection Equipment (as in section 8) during clean up.

Environmental precautions:

Do not discharge into drains or rivers. Contain the spillage using bunding.

Methods for cleaning up:

Contain spill - do not allow material to enter sewers or bodies of water. Keep unprotected persons and animals out of the area. Soak up with sand, sawdust or other absorbent material, shovel or sweep up. Transfer to a closable, labelled salvage container for disposal by an appropriate method (eg. bury in an approved landfill).

7. HANDLING AND STORAGE

Handling:

Store in original container, tightly closed in a locked, dry, well ventilated place away from food or feedstuffs. Keep away from sparks, heat and flames. Keep out of reach of children or animals

Storage:
Packaging materials:

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Workplace Exposure Guidelines

Workplace exposure standards:

Application in the workplace:

**Exposure Standards outside:
The workplace:**

Engineering measures

Ensure there is sufficient ventilation of the area. Ensure lighting and electrical equipment are not a source of ignition.

Hierarchy of controls:

Exposure control measures:

No Hazard indication:

Ventilation specification:

Wear dual cartridge respirator for dusts and mists.

Personal Protective Equipment

Detail specifications for equipment:

Avoid contact with skin and eyes. Do not inhale spray. Wear long sleeved shirt, long pants ,waterproof gloves and safety goggles or face shield. Do not eat, drink or smoke when using. Wash hands and face before meals and after work.

Respiratory system:

Skin and body:

Mixers and loader must wear overalls, protective goggles and chemical resistant apron. Applicators and other operators must wear overalls, protective goggles and and waterproof gloves. Any clothing or other absorbent material which has been drenched or heavily contaminated must be discarded.

Hands:

Protective gloves

Eyes:

Safety goggles

General hygiene:

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:

Liquid

Colour:

Yellow liquid

Odour:

Sulphurous odour

pH:

6 – 7.5

Vapour Pressure:

2266.5Pa @20°C

Vapour Density:

Boiling Point: 100°C
Freezing/melting point: NA
Solubility: Disperses
Specific gravity or density: 1.27 density

Information for flammable material including:

- **Lower and upper flammability limits**
- **Flashpoint (state test Method)**

Auto – ignition Temperature:
Octanol/water partition coefficient:
Explosion properties:
Oxidation properties:

10. STABILITY AND REACTIVITY

Stability: Stable under normal conditions

Conditions to avoid:

Materials to avoid:

Hazardous decomposition Products: *(list the known decomposition products)*

Hazardous polymerization: *(state any substance likely to polymerize and cause dangerous conditions)*

Specific Data: *(state any other information which might describe a likely hazard from the product including mixtures)*

Hazardous reactions : Chloride compounds and nitrogen oxides.

11. TOXICOLOGICAL INFORMATION

Acute toxicity – Oral : LD50 > 5,000 mg/kg (Rat)

Acute toxicity - Dermal : Acute Dermal LD50 > 2,000 mg/kg (Rabbit)

Acute toxicity – Inhalation: Acute Dermal LD50 > 2,000 mg/kg (Rabbit)

Skin irritation :

Eye irritation:

Sensitization :

Common name :

Chronic toxicity :

Carcinogenicity:

Mutagenicity:

Reproduction toxicity:

Other information :

12. ECOLOGICAL INFORMATION

1 A very ecotoxic in aquatic environment
LC 50 = 1.9mg/litre, 48hr (Rainbow trout), 1.63 mg/litre ,48
hr

(Bluegill sunfish).

Do not contaminate bodies of water with chemical or
empty container.

Common name

Mobility

Soil

Water

Persistence/degradability Soil

Water

Bees

Non toxic to terrestrial invertebrates, contact LC50
Honeybee > 100µg/bee.

Bioaccumulative potential :

Ecotoxicity

Daphnia magna

Algae (scenedesmus subspicatus)

Birds

Non toxic to birds LD 50 > 6,400 mg/kg (Mallard duck) (
Japanese quail).

13. DISPOSAL CONSIDERATIONS

Methods of disposal :

Triple rinse container and add residue to spray tank. Submit
clean empty container for recycling through Agrecovery. If this is
not possible, burn if permitted and circumstances, especially
wind direction allow, otherwise bury in landfill.

14. TRANSPORT INFORMATION

International transport regulations

Maximum quantity: 250 litres.

Segregation Requirements: Land Transport Rule: Dangerous Goods 1999 Requires that Class 9 is not
transported with Classes 1 or food.

International transport regulations:

UN number:

3082

Land - Road/Railway

Proper shipping name :

**ENVIRONMENTALLY HAZARDOUS SUBSTANCE, Liquid
N.O.S. (Mancozeb)**

15. REGULATORY INFORMATION

ACVM Registered Number:

P8220

16. OTHER INFORMATION

Additional information:

Disclaimer: To the extent permitted by law, buyers and/or users of the goods accept that neither the manufacturer, Etec Crop Solutions Ltd as distributor, nor any other distributor have any liability or responsibility whatsoever for any loss, damage or injury whether in contract or tort, whether direct, indirect or consequential howsoever arising in connection with the supply of these goods.

Trademarks: Supermanz is a trademark of Etec Crop Solutions Ltd