

KOMBAT DITHANE M-45

Version 1.2

Revision Date: December 2016



1. IDENTIFICATION OF SUBSTANCE / PREPARATION AND COMPANY UNDERTAKING:

PRODUCT INFORMATION

Product Name : KOMBAT DITHANE M-45
Design Code :
Registration No. : L2741, Act No. 36 of 1947
Use : Fungicide
Company : Kombat (Pty) Ltd
39 Dr. Gordon Road
Greytown
3250
Telephone : +27-33-417-1906/7



Harmful



Dangerous for the environment

EMERGENCY TELEPHONE NUMBERS

SPILLAGES:

Emergency telephone: +27-82-446-8946 (all hours)

POISONING INCIDENTS:

Poison Information Centre of the Western Cape: +27-861-555-777 (all hours)

Griffon Poison Information Centre +27-82-446-8946 (all hours)

UFS Pharmacology/Toxicology information centre: +27-82-491-0160

2. HAZARD IDENTIFICATION

EMERGENCY OVERVIEW

Hazardous Chemical. Greyish yellow powder. May cause eye or skin irritation. Oral LD50 for rats is 100-250 mg/kg. Vapor LC50 for rats is >5000 mg/M3. Toxic to aquatic organisms and avian.

POTENTIAL HEALTH EFFECTS: This section includes possible adverse effects, which could occur if this material is not handled in the recommended manner.

EYE: May cause slight transient (temporary) eye irritation. Corneal injury is unlikely.

SKIN: Prolonged exposure may cause skin irritation. Repeated exposure may cause skin burns. A single prolonged exposure is not likely to result in the materials being absorbed through the skin in harmful amounts. The LD50 for skin absorption is >5000 mg/kg (rabbits) and >2000 mg/kg (rats).

INHALATION: Dust inhalation may irritate upper respiratory tract.

INGESTION: Ingestion causes nausea and vomiting.

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3. COMPOSITION / INFORMATION ON INGREDIENTS

Mancozeb Technical 75%
Suspending Agent 2%
Dispersing Agent 2%
Surface Active Agent 2%
China Clay q.s. to make 100%

4. FIRST- AID MEASURES

EYES: Flush with plenty of water for 5 minutes. Seek medical attention if irritation persists.

SKIN: Immediately wash with plenty of soap and water. Consult medical personnel. Remove contaminated clothing immediately and wash before reuse. Remove, destroy, and dispose of contaminated shoes and other leather articles, such as belts and watchbands.

INGESTION: Call a physician or poison information center immediately. Drink one or two glasses of water and induce vomiting by touching back of throat with finger. Do not give anything by mouth to an unconscious person.

INHALATION: Remove to fresh air if symptoms of cholinesterase inhibition appear. Seek medical attention immediately.

NOTE TO PHYSICIAN: Treat symptomatically. In case of severe poisoning, use antidote immediately after establishing an open airway and respiration. Supportive care. Treatment based on judgment of the physician in response to reactions of the patient.

5. FIRE-FIGHTING MEASURES

FLASH POINT: 137°C

METHOD USED: Able Close Cup

FLAMMABLE LIMITS

LFL: Not applicable

UFL: Not applicable

HAZARDOUS COMBUSTION PRODUCTS: During a fire, smoke may contain the original material in addition to unidentified toxic and/or irritating compounds. Hazardous combustion products may include and are not limited to sulfur oxides, phosphorus compounds, nitrogen oxides, hydrogen chloride, carbon monoxide, and carbon dioxide. Container may rupture from gas generation in a fire situation.

EXTINGUISHING MEDIA: Water fog or fine spray, carbon dioxide, dry chemical, and or foam. Alcohol resistant foams (ATC type) are preferred if available. General purpose synthetic foams (including AFFF) or protein foams may function, but much less effectively. Water fog, applied gently may be used as a blanket for fire extinguishment. Do not use direct water stream. May spread fire.

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MEDIA TO BE AVOIDED: Do not use direct water stream.

FIRE FIGHTING INSTRUCTIONS: Keep people away. Isolate fire area and deny unnecessary entry. Consider feasibility of a controlled burn to minimize environmental damage. Foam fire extinguishing system is preferred because uncontrolled water can spread possible contamination. Hand held carbon dioxide or dry chemical extinguishers may be used for small fires. Burning liquids may be moved by flushing with water to protect personnel and minimize property damage. Water fog, applied gently may be used as a blanket for fire extinguishment. Do not use direct water stream. May spread fire. Fight fire from protected location or safe distance. Consider use of unmanned hose holder or monitor nozzles. Use water spray to cool fire exposed containers and fire affected zone until fire is out and danger of re-ignition has passed. Immediately withdraw all personnel from area in case of rising sound from venting safety device or discoloration of the container. Move container from fire area if this is possible without hazard. Contain firewater run-off if possible. Fire water run-off, if not contained may cause environmental damage.

PROTECTIVE EQUIPMENT FOR FIREFIGHTERS: Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, pants, boots, and gloves). If protective equipment is not available or not used, fight fire from a protected location or safe distance.

6. ACCIDENTAL RELEASE MEASURES

ACTION TO TAKE FOR SPILLS/LEAKS: For small spills, sweep up and place in a suitable container for disposal. Keep product out of sewers. Report large spills to the Griffon Poison Information Centre +27-82-446-8946

7. HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: See product label. Keep out of reach of children. May be fatal if swallowed. Avoid eye and skin contact. Wash thoroughly with soap and water after handling and before eating, drinking or smoking. Avoid breathing dust. Toxic to fish. Recommend storage in a cool, dry place away from high temperatures, hot pipes, and direct sunlight. Store in original container.

8. EXPOSURE CONTROL / PERSONAL PROTECTION

These precautions are suggested for conditions where a potential for exposure exists. Emergency conditions may require additional precautions.

ENGINEERING CONTROLS: Provide general and/or local exhaust ventilation to control airborne levels below the exposure guidelines.

RESPIRATORY PROTECTION: Atmospheric levels should be maintained below.

RECOMMENDATIONS FOR MANUFACTURING, COMMERCIAL BLENDING, AND

PACKAGING WORKERS:

RESPIRATORY PROTECTION: Atmospheric levels should be maintained below the exposure guideline. For most conditions, no respiratory protection should be needed; however, if handling

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at elevated temperatures without sufficient ventilation, use a NIOSH approved air-purifying respirator.

SKIN PROTECTION: No precautions other than clean body-covering clothing should be needed.

APPLICATORS AND ALL OTHER HANDLERS: Please refer to the product label for personal protective clothing and equipment.

9. PHYSICAL AND CHEMICAL PROPERTIES

MELTING POINT: 192 - 204°C

VAPOR PRESSURE: NA

VAPOR DENSITY: Not applicable

SOLUBILITY IN WATER: Soluble

SPECIFIC GRAVITY: 1.92

DENSITY: NA

APPEARANCE: Greyish Yellow

ODOUR: Faint, characteristic

10. STABILITY AND REACTIVITY

STABILITY: Stable under normal storage conditions. Unstable at elevated temperatures.

CONDITIONS TO AVOID: Generation of gas during decomposition can cause pressure in closed systems.

INCOMPATIBILITY: Avoid contact with oxidizing materials and bases.

HAZARDOUS DECOMPOSITION: Hazardous decomposition products depend upon temperature, air supply and the presence of other materials. Hazardous decomposition products may include and are not limited to hydrogen chloride, organic sulfides, and/or sulfur dioxide.

HAZARDOUS POLYMERIZATION: Not known to occur.

11. TOXICOLOGICAL INFORMATION

MUTAGENICITY: Not mutagenic.

TERATOGENICTY: Birth defects were recorded a very high dosages.

CARCINOGENICITY: Not known to cause cancer although listed as a potential human carcinogen by the US EPA.

12. ECOLOGICAL INFORMATION

ECOTOXICOLOGY: Relatively safe to fish but can be toxic to fish.

13. DISPOSAL CONSIDERATIONS

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DISPOSAL METHOD: Do not contaminate food, feed, or water by storage or disposal. Improper disposal of excess material, spray mixture, or rinsate is a violation of federal law. If wastes



resulting from the use of this product cannot be disposed of by use according to label instructions, dispose of these wastes at an approved hazardous waste facility. Contact your local hazardous waste facility guidance. Empty containers need to be triple rinsed, punctured and disposed of via a licensed plastics recycler.

14. TRANSPORT INFORMATION**DOT Non-Bulk**

NOT REGULATED

DOT Bulk

NOT REGULATED

IMDG**Proper Shipping Name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.**Technical Name:** MANCOZEB**Hazard Class:** 9 **ID Number:** UN3077**Packing Group:** PG III**EMS Number:** F-A,S-F**Marine Pollutant:** Yes**ICAO/IATA**

NOT REGULATED

Additional Information

MARINE POLLUTANT (MANCOZEB)

15. REGULATORY INFORMATION

NOTICE: The information herein is presented in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ from one location to another; it is the buyer's responsibility to ensure that its activities comply with federal, state or provincial, and local laws. The following specific information is made for the purpose of complying with numerous federal, state or provincial, and local laws and regulations.

CHEMICAL NAME CAS NUMBER CONCENTRATION

Ethylene Thiourea 000096-45-7 0.1%

Mancozeb 008018-01-7 80%

Generic Group Name for Mancozeb:

Ethylenebisdithiocarbamic Acid (CAS # 000111-54-6)

CHEMICAL NAME CAS NUMBER LIST

Ethylene Thiourea 000096-45-7 PA1 PA2 PA3

Ethylenebisdithiocarbamic 000111-54-6 PA1 PA3 Acid

16. OTHER INFORMATION**Disclaimer:**

Information in this Safety Data Sheet is believed to be reliable but no representation, guarantee or warranties of any kind are made as to its accuracy, suitability for a particular application or

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results to be obtained from them. It is up to the user/distributor to ensure that the information contained in the Safety Data Sheet is relevant to the product manufactured / handled or sold by him as the case may be.
