

MANNIX™

75 WDG

SAFETY DATA SHEET

EMERGENCY CALL: 1-800-424-9300 (CHEMTREC)

1. IDENTIFICATION

PRODUCT NAME: Mannix 75 WDG
DESCRIPTION: A solid fungicide
EPA REG. NO.: 91234-241
COMPANY IDENTIFICATION: Atticus, LLC
940 NW Cary Parkway, Suite 200
Cary, NC 27513

2. HAZARD IDENTIFICATION

WARNING

May cause an allergic skin reaction (H317)
Suspected of causing cancer (H351)
Suspected of damaging fertility or the unborn child (H361)
Harmful in contact with skin (H312)
Very toxic to aquatic life with long lasting effects (H400+H410)



HAZARD CLASSIFICATION

Health Hazards	Category	Physical Hazards	Category
Skin sensitization	1	None	-
Reproductive Toxicity	2		
Carcinogenicity	2	Environmental Hazards	Category
Acute toxicity, dermal	4	Hazardous to the aquatic environment, short-term	1
		Hazardous to the aquatic environment, long-term	1

HAZARDS NOT REQUIRING CLASSIFICATION

None

PRECAUTIONARY STATEMENTS

Obtain, read and follow all safety instructions before use. Avoid breathing dust. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves/protective clothing. (P203+P261+P272+P280)

IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical help. Specific treatment (see First Aid on this label). Take off contaminated clothing and wash it before reuse. (P302+P352+P333+P317+P321+P362+P364)

IF exposed or concerned, get medical advice. (P318)

Avoid release to the environment not in accordance with the product label. Collect spillage. (P273+P391)

Store locked up. (P405)

Dispose of contents / container in accordance with local regulations. Refer to the product label for specific disposal instructions. (P501)

3. COMPOSITION / INFORMATION ON INGREDIENTS

Common Name	Chemical Name	CAS #	Composition
Mancozeb	[[1,2-ethanediy]bis[carbamo]dithioato]] (2-)manganese mixture with [[1,2-ethanediy]bis[carbamo]dithioato]] (2-)zinc,	8018-01-7	75%
Ethylene thiourea (ETU)	2-imidazolidinethione	96-45-7	0-0.1%

NOTE: Ingredients not precisely identified are proprietary or non-hazardous. Values are not product specifications.

4. FIRST AID MEASURES

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact SafetyCall at **1-844-685-9173** for emergency medical treatment information.

IF ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

Refer to product label for additional First Aid.

5. FIREFIGHTING MEASURES

Flash Point: Not available

Fire and Explosion Hazards: No information available.

Extinguishing Medium: Dry chemical, carbon dioxide (CO₂), water spray, alcohol-resistant foam.

Fire Fighting Equipment: Firefighters should be equipped with self-contained positive pressure breathing apparatus and full bunker gear.

Fire Fighting Instructions: Evacuate area of all unnecessary personnel and fight fire from a safe distance upwind. Contain contaminated water / firefighting water; do not allow to enter drains or waterways. Foam or dry chemical fire extinguishing systems are preferred to prevent environmental damage from excessive water runoff.

Hazardous Combustion Products: Carbon disulfide, ethylene thiourea (ETU), sulfur oxides, oxides of nitrogen, oxides of carbon.

NFPA Ratings: Health – 2 / Flammability – 1 / Reactivity – 1

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Isolate area and keep unnecessary and unprotected personnel from entering. Wear suitable personal protective clothing and equipment as described in Section 8 of this document.

Environmental Precautions: Contain spillage and minimize spread. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Keep out of drains, sewers, ditches and water ways. Do NOT contaminate water when disposing of rinse waters.

Spill Cleanup: Avoid creating dust during cleanup. Sweep, scoop or shovel spilled material and place into suitable closed containers for reuse or disposal. After decontamination, spill area can be washed with water. Collect washwater for approved disposal. Place leaking containers in oversize leakproof drums for transport.

7. HANDLING AND STORAGE

Handling: Avoid contact with skin, clothing or eyes. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

Storage: Important-Never allow Mannix 75 WDG to become wet during storage. This may lead to certain chemical changes which will reduce the effectiveness of Mannix 75 WDG as a fungicide and create vapors which may be flammable. Keep container closed when not in use. Store product in original container only, away from other pesticides, fertilizer, food or feed in a secure dry area.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls: Use local exhaust ventilation, or other engineering controls to maintain airborne levels below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, general ventilation should be sufficient for most operations. Local exhaust ventilation may be necessary for some operations. Facilities storing or utilizing this material should be equipped with an eyewash station and a safety shower.

Protective Clothing: Applicators and other handlers must wear: long-sleeved shirt and long pants; shoes and socks; and chemical resistant gloves made of any waterproof material (except pilot, groundboom applicators, and airblast applicators).

General: Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If there are no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	yellow solid
Odor:	characteristic odor
Melting/freezing point:	not available
Boiling point/Boiling range:	not available
Flammability:	not available
Flammability limits (upper/lower):	not available
Flash point:	not available
Auto-ignition temperature:	205°C (401°F)
Decomposition temperature:	not available
pH:	7-8
Pycnometer viscosity:	not available
Solubility:	soluble
Partition coefficient:	not available

Vapor pressure:	not available
Bulk Density:	0.5-0.6 g/mL
Particle characteristics:	not available

10. STABILITY AND REACTIVITY

CONDITIONS TO AVOID: To avoid thermal decomposition, do not overheat. Keep away from children.

CHEMICAL STABILITY: Stable under normal conditions.

INCOMPATIBILITY WITH OTHER MATERIALS: Strong oxidizing agents. Acids.

HAZARDOUS DECOMPOSITION PRODUCTS: Hydrogen sulfide, ethylene thiourea (ETU), carbon disulfide.

HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION

The following data is from a substantially similar product:

ORAL TOXICITY (rat LD₅₀): > 5,000 mg/kg

DERMAL TOXICITY (rabbit LD₅₀): > 2,000 mg/kg

INHALATION TOXICITY (rat LC₅₀): > 5.4 mg/L (4-hour)

EYE IRRITATION: Mild to moderate eye irritant. (Rabbit)

SKIN IRRITATION: Mild and slight skin irritant. (Rabbit)

SKIN SENSITIZATION: Sensitizer (Guinea pig)

CARCINOGENICITY:

EPA: Group B2: Probable human carcinogen (mancozeb)

ACGIH: Not Listed **NTP:** Not Listed

IARC: Not Listed **OSHA:** Not Listed

SUBCHRONIC (TARGET ORGAN) EFFECTS: Respiratory system and eyes.

REPRODUCTIVE/DEVELOPMENTAL TOXICITY: Developmental malformations were observed in the mancozeb rat developmental toxicity study but do not indicate susceptibility to offspring as they occurred at the same dose level that caused maternal mortality. No adverse reproductive or offspring effects were observed in the two-generation reproduction study up to the highest dose. However, evidence of quantitative susceptibility was noted in the developmental neurotoxicity study with mancozeb, since decreased pup body weight occurred in the absence of maternal toxicity.

GENOTOXICITY: Data regarding the mutagenicity are inconclusive but suggest that mancozeb is either not mutagenic or weakly mutagenic.

12. ECOLOGICAL INFORMATION

Toxicity of mancozeb to estuarine/marine invertebrates indicate the chemical is very highly toxic on an acute exposure basis. Mancozeb is moderately toxic to estuarine/marine fish and freshwater invertebrates on an acute exposure basis.

The following information is for the active ingredient, Mancozeb:

AQUATIC TOXICITY

Rainbow Trout (96-hour LC₅₀): 0.91 mg/L

Fathead Minnow (28-day NOAEC): 0.00219 mg/L

Waterflea (48-hour EC₅₀): 1.04 mg/L; (21-day NOAEC): 0.018 mg/L

Eastern Oyster (96-hour LC₅₀): 1.60 mg/L

Algae (96-hour EC₅₀): 0.047 mg/L; (96-hour NOAEC): 0.022 mg/L

AVIAN TOXICITY

Mallard Duck (NOAEC): 125 ppm (14-day old hatchling weight, egg production, hatchability, embryo viability)

OTHER TOXICITY

Honeybee (96-hpur LD₅₀): 179 µg/bee

13. DISPOSAL CONSIDERATIONS

PESTICIDE DISPOSAL: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL: Nonrefillable container. Do not reuse or refill this container. Refer to the product label for specific container disposal instructions.

14. TRANSPORT INFORMATION

US-DOT:

Not regulated

IMDG:

Containers ≤ 11 lbs. (5 kg) in strong outer packaging:

Not regulated

Containers > 11 lbs. (5 kg) or containers not in strong outer packaging:

Shipped internationally by vessel: UN3077, Environmentally hazardous substance, solid, N.O.S. (mancozeb), 9, PG III, Marine Pollutant

IATA:

Shipped by air: UN3077, Environmentally hazardous substance, solid, N.O.S. (mancozeb), 9, PG III, Marine Pollutant

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations. Additional transportation system information can be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to (follow all applicable laws, regulations and rules relating to the transportation of the material.

15. REGULATORY INFORMATION

FIFRA -

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. The following is the hazard information as required on the pesticide label:

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION. Harmful if absorbed through skin. Causes moderate eye irritation. Avoid contact with skin, clothing or eyes. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

Environmental Hazards

This product is toxic to aquatic organisms. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. DO NOT apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Cover or incorporate spilled treated seed. DO NOT contaminate water by disposing of equipment washwater or rinsate. Cover or incorporate spilled treated seed.

All pesticides are governed under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). The regulatory information presented below is pertinent only when this product is handled outside of the normal use and application as a pesticide. This product is excluded from listing requirements under EPA/TSCA.

SARA Title III - Section 302 Extremely Hazardous Substances

Not listed

SARA Title III - Section 311/312 Hazard Categories

Immediate (Acute), Delayed (Chronic)

SARA Title III - Section 312 Threshold Planning Quantity

The threshold planning quantity (TPQ) for this product treated as a mixture is 10,000 lbs. This product contains no ingredients with a TPQ of less than 10,000 lbs.


SARA Title III - Section 313 Reportable Ingredients

None

CERCLA Reportable Quantity (RQ) -

None

CALIFORNIA PROP 65 STATUS -

 **WARNING:** This product can expose you to chemicals including mancozeb and ethylene thiourea, which is known to the State of California to cause cancer or developmental toxicity. For more information, go to www.P65Warnings.ca.gov.

CANADA -

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by CPR.

16. OTHER INFORMATION

This Safety Data Sheet (SDS) serves different purposes than and DOES NOT REPLACE OR MODIFY THE EPA APPROVED PRODUCT LABELING (attached to and accompanying the product container). This SDS provides important health, safety, and environmental information for employers, employees, emergency responders and others handling large quantities of the product in activities generally other than product use, while the labeling provides that information specifically for product use in the ordinary course.

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SDS Version: 1.0

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