



SUNFARM AGROCHEMICALS LTD

ADD.: XIAOMIAO TOWN, SHUSHAN DISTRICT, HEFEI, ANHUI, CHINA
WWW.SUNFARMCHEM.COM SUNFARMAGRO@YAHOO.COM +86-15986675013

Material Safety Data Sheet

(In accordance with 2001/58/EC)

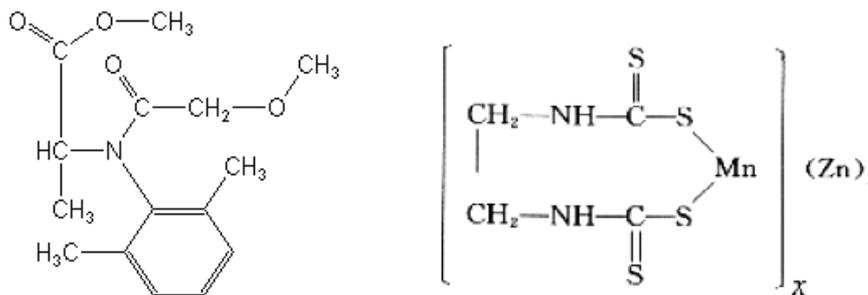
SECTION 1: IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product name: **METALAXYL 8%+MANCOZEB 64%WP (W/W)**

CAS No.: **57837-19-1; 8018-01-7**

Empirical formula: **C₁₅H₂₁NO₄; [C₄H₆MnN₂S₄] x Zn y**

Structural formula:



Molecular weight: **279.3; 271.2**

Product use: **FUNGICIDE**

Chemical Formulation: **WETTABLE POWDER**

Supplier: **SUNFARM AGROCHEMICALS LTD.**

SECTION 2: COMPOSITION / INFORMATION ON INGREDIENTS

Composition	Content (% w/w)	CAS number
METALAXYL	8	57837-19-1
MANCOZEB	64	8018-01-7

SECTION 3: HAZARDS IDENTIFICATION

Eye contact: Non-irritating to eyes.

Skin contact: Non-irritating to skin.

Ingestion: Harmful if swallowed.

Inhalation: May cause irritation.

SECTION 4: FIRST AID MEASURES

If poisoning occurs, contact a Doctor or Poisons Information Centre.

Ingestion: Give a large glass of milk or water and contact a physician or poison control center immediately.

Eye contact: Flush eyes with water immediately and continuously for 15 minutes.

Skin contact: Wash skin with plenty of soap and water for 15 minutes. Remove contaminated clothing and wash before reuse.

Inhalation: Remove to fresh air.

SECTION 5: FIRE FIGHTING MEASURES

Extinguishing media: Foam, dry powder, carbon dioxide, water fog.



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Hazards from combustion products: Thermal decomposition or combustion may produce irritating and possibly toxic gases.

Precautions for fire fighters: Wear full protective clothing and self-contained breathing apparatus. Evacuate nonessential personnel from the area to prevent human exposure to fire, smoke, fumes or products of combustion. Prevent use of contaminated buildings, area, and equipment until decontaminated. Water runoff can cause environmental damage. If water is used to fight fire, dike and collect runoff.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precaution: Avoid contact with spilled material or contaminated sources. If ordinary clothing becomes contaminated remove it immediately. When dealing with the spillage do not eat, drink or smoke and wear personal protective clothing

Small spill: Shut off ignition sources. Stop release dike or contain release and access to the release area. Take actions to reduce vapor dilute with absorbent materials like sand/saw dust. Clean spill areas of residues and absorbent.

Large spill: Shut off ignition sources stop release dike or contain release. Isolate and control access to the release area. Take action to reduce vapors. Collect product in to drums and clear spillers.

SECTION 7: HANDLING AND STORAGE

Handling: Handle and open container in a manner as to prevent spillage. Avoid contact with skin, eyes and clothing. Wash hands after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove clothing/PPE immediately after handling this product. Wash thoroughly and put on clean clothing.

Storage: Store in the closed, original container in a cool, well ventilated area out of reach of children and domestic animals. Do not store for prolonged periods in direct sunlight. Do not contaminate water, other pesticides, fertilizer, food, or feed by storage or disposal.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls: Ensure adequate ventilation, especially in confined areas. Provide local exhaust or process enclosure ventilation system. Ventilation equipment should be explosion-resistant if explosive concentrations of material are present.

Personal protective equipment

Eye/Face: To protect against accidental eye contact, goggles/face-shield should be worn.

Skin protection: Wear long-sleeved shirt, long pants, shoes plus socks. Chemical-resistant gloves such as barrier laminate, butyl rubber, neoprene rubber, polyvinyl chloride (PVC) should be worn. For overhead exposure, wear chemical resistant headgear.

Inhalation: A respirator is not normally required when handling this substance.

SECTION 9: PHYSICAL PROPERTIES

Physical state: Powder

Colour: Kelly

Odour: Slight odor

pH value: 6.5~8.5

Wettability: 60 sec. max.

Wet sieve test: 98% min. (Through 75µm sieve)



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Solubility: Disperses in water. **Oxidizing properties:** Non-oxidizing
Flammability: Non-flammable **Explosive properties:** Non-explosive
Corrosive properties: Non-corrosive
Stability: Stable for at least two years under normal storage and usage conditions

SECTION 10: STABILITY AND REACTIVITY

Chemical stability: Stable at normal temperature.
Hazardous polymerization: Will not occur.
Conditions to avoid: Strong acids and bases.
Incompatibility (materials to avoid): Avoid contact with strong acidic, strong basic or oxidizing agents.
Hazardous decomposition products: Noxious fumes produced under fire conditions may include carbon monoxide, carbon dioxide and nitrogen oxide.

SECTION 11: TOXICOLOGICAL INFORMATION

Ingestion (oral): rat LD₅₀ > 2000 mg/kg
Skin (dermal): rabbit LD₅₀ > 2000 mg/kg
Inhalation: LC₅₀ (4h) >5.16 mg/L for rats
Eye irritation: non-irritating to eyes Rabbits
Skin irritation: non-irritating to rabbit skin.
Sensitization: Not a skin sensitizer (Guinea pigs)

SECTION 12: ECOLOGICAL INFORMATION

METALAXYL:

Birds: LD₅₀ for Japanese quail (7 d) 923, mallard ducks (8 d) 1466 mg/kg. LC₅₀ (8 d) for Japanese quail, bobwhite quail and mallard ducks >10000 mg/kg.
Fish: LC₅₀ (96 h) for rainbow trout, carp, and bluegill sunfish >100 mg/L
Daphnia: LC₅₀ (48 h) >28 mg/L
Algae: IC₅₀ (5 d) for *Scenedesmus subspicatus* 33 mg/L
Bees: Not toxic to bees. LD₅₀ (48 h) (contact) >200 µg/bee; (oral) 269.3 µg/bee.

MANCOZEB:

Birds: Acute oral LD₅₀ (10 d) for mallard ducks >5500, Japanese quail 5500, English sparrows (*Passer domesticus*) >1290, European starlings (*Sturnus vulgaris*) >2400 mg/kg.
Fish: LC₅₀ (96 h, flow-through) for rainbow trout 1.0, bluegill sunfish >3.6 mg/L; (96 h static-renewal) for rainbow trout 0.15, 0.088, 0.074, bluegill sunfish 0.083 mg/L; (96 h, static sediment/water microcosm) for rainbow trout 0.073, bluegill sunfish 0.84, common carp 1.7 mg/L.
Daphnia: EC₅₀ (48 h, flow-through) 3.8 mg/L; (48 h, static-renewal) 0.073 mg/L; (24 h, static) 0.011 mg/L; (48 h, static) 0.39 mg/L.
Algae: EC₅₀ (120 h, cell density) for *Selenastrum capricornutum* 0.044 mg/L.
Bees: LD₅₀ (oral) >209 µg/bee; (contact) >400 µg/bee.

SECTION 13: DISPOSAL CONSIDERATIONS



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Product: Excess product may be disposed of by agricultural use according to label instructions. Keep out of drains, sewers, ditches and water ways. Recycle if appropriate facilities/equipment available. Burn in proper incinerator. Follow all local / regional / national / international regulations.

Packaging: See the individual container label for disposal information. Emptied containers retain vapor and product residue. Observe all labeled safeguards until container is cleaned, reconditioned or destroyed. Empty packaging completely. Store for collection by approved waste disposal service. Ensure packaging cannot be reused. Do NOT re-use containers. Recycle if appropriate facilities/equipment available. Follow all local/ regional/ national/ international regulations.

SECTION 14: TRANSPORT INFORMATION

UN Number: 3077

Proper Shipping Name: Environmentally hazardous substance, Soild, N.O.S

Dangerous Goods Class: 9

Packing Group: III

SECTION 15: REGULATORY INFORMATION

Risk phrases:

R20/22 Harmful by inhalation and if swallowed.

Safety phrases:

S2 Keep out of the reach of children.

S3/7/9 Keep container tightly closed in a cool, well-ventilated place.

S13 Keep away from food, drink and animal feeding stuffs.

S20/21 When using, do not eat, drink or smoke.

S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

S61 Avoid release to the environment, refer to special instructions/Safety data sheets.

SECTION 16: OTHER INFORMATION

This MSDS summarizes best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user should read this MSDS and consider the information in the context of how the product will be handled and used in the workplace including in conjunction with other products.

If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact this company.

Our responsibility for products sold is subject to our standard terms and conditions, a copy of which is sent to our customers and is also available on request. ---End of MSDS

For and on behalf of

SUNFARM AGROCHEMICALS LTD.