

**1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND OF THE COMPANY / UNDERTAKING**

<b>Product name:</b>	MANCOZEB 64% + METALAXYL-M 4% WP (MATCO GOLD 68% WP)
<b>Use / description of product:</b>	Use as an agricultural/horticultural fungicide
<b>Company name:</b>	INDOFIL INDUSTRIES LIMITED Kalpataru Square, 4th Floor, Kondivita Road, Off. Andheri Kurla Road, Andheri (E), Mumbai 400 059, Maharashtra, India. Email: <a href="mailto:customercare@indofil.com">customercare@indofil.com</a> Toll Free No.: 1800-120-003-004

**2. HAZARDS IDENTIFICATION**

**GHS Classification**  
**Hazard Symbol**



**Signal word:**  
**Hazard statement(s):**

**WARNING**

H303 May be harmful if swallowed.  
 H317 May cause an allergic skin reaction.  
 H335 May cause respiratory irritation.  
 H361 Suspected of damaging fertility or the unborn child.  
 H373 May cause damage to organs through prolonged or repeated exposure.  
 H400 Very toxic to aquatic life  
 P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spary  
 P264 Wash skin thoroughly after handling.  
 P270 Do not eat, drink or smoke when using this product  
 P271 Use only outdoors or in a well-ventilated area.  
 P273 Avoid release to the environment.  
 P280 Wear protective gloves/ eye protection/ face protection  
 P284 Wear respiratory protection.  
 P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell.  
 P302 + P352 IF ON SKIN: Wash with plenty of soap and water.  
 P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

**3. COMPOSITION / INFORMATION ON INGREDIENTS**

Chemical name	CAS	%
Active ingredient (Mancozeb)	8018-01-7	64%
Active ingredient (Metalaxyl-M)	70630-17-0	4%
Other ingredients	-----	QS

#### 4. FIRST AID MEASURES

**Most Important symptoms and effects, both acute and delayed**

**Skin contact**

There may be mild irritation at the site of contact

**Eye contact**

There may be irritation and redness.

**Ingestion**

There may be soreness and redness of the mouth and throat

**Description of first aid measures**

**In general,**

Never give fluids or induce vomiting if patient is unconscious or is having convulsions. Seek medical advice immediately (show the label where possible)

**After Ingestion**

If swallowed dilute by giving 2 glasses of water to drink and call a doctor. Never give any by mouth to an unconscious person

**After eye contact**

Flush eyes with plenty of water for at least 15 minutes and see doctor

**After skin contact**

Immediately wash skin with soap and plenty of water. Consult a physician if irritation develops.

**After Inhalation**

Remove to fresh air. Consult a physician if irritation develops

**Indication of any immediate medical attention and special treatment needed**

Supportive care. No specific antidote. Treatment based on judgement of physician, in response to symptoms of patient.

#### 5. FIRE-FIGHTING MEASURES

**Extinguishing media:**

Water spray. Carbon dioxide. Dry chemical powder.

**Exposure hazards:**

May form flammable / explosive dust-air mixture. In combustion emits toxic fumes of sulphur Oxides, nitrogen oxides, carbon dioxide / carbon monoxide.

**Protection of fire-fighters:**

Wear self-contained breathing apparatus. Run-off from fire control may be a pollution hazard. If area is not too heavily exposed to fire, and if conditions permit, let fire burn itself out, since water may increase the contamination hazard.

#### 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions:**

Eliminate all sources of ignition. Do not create dust.

**Environmental precautions:**

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

**Clean-up procedures:**

Transfer to a closable, labelled salvage container for disposal by an appropriate method.

Do not use equipment in clean-up procedure which may produce sparks.

#### 7. HANDLING AND STORAGE

**Handling requirements:**

Ensure there is sufficient ventilation of the area. Smoking is forbidden. Use non-sparking tools.

When handling do not eat, drink or smoke.

**Storage conditions:**

Store in cool, well-ventilated area. Keep away from sources of ignition. Keep container tightly closed. Keep in original containers, out of reach of children Never allow the product to

become wet during storage. This may lead to chemical changes, which will reduce the effectiveness as a fungicide and could create flammable vapours.

**Suitable packaging:**

Must only be kept in original packaging.

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

**Engineering measures:**

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

**Respiratory protection:**

Wear an approved respirator.

**Hand protection:**

Protective gloves

Requirements can vary as a function of the use. Therefore, it is necessary to adhere additionally to the recommendations given by the manufacturer of protective gloves.

**Eye protection:**

Safety goggles.

**Skin protection:**

Mixers and loaders must wear overalls, protective goggles and chemical-resistant apron.

Applicators and other handlers must wear overalls, goggles and waterproof gloves. Any clothing or other absorbent material which has been drenched or heavily contaminated must be discarded.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**State:**

Solid

**Colour:**

Yellow

**Odour:**

Misty odour

**Solubility in water:**

Forms dispersion in water

**pH**

5 to 8 (1% dispersion)

**Flash point °C:**

Not applicable

**10. STABILITY AND REACTIVITY**

**Stability:**

Stable under normal conditions.

**Conditions to avoid:**

Excessive temperatures.

**Hazardous decomp. products:**

Decomposition on heating above 22°C. Decomposed on heating in alkaline media with the formation of copper oxides. Decomposition will evolve toxic and irritant vapors.

**11. TOXICOLOGICAL INFORMATION**

**Hazardous ingredients:**

MANCOZEB and METALAXYL-M

Acute toxicity (Assessment largely or completely based on data for active substance)

Acute Oral LD<sub>50</sub> (Rat):

Mancozeb->5000 mg/kg; Metalaxyl-M – 375 mg/kg

Acute Dermal LD<sub>50</sub> (Rat)

>5000 mg/kg – Mancozeb; >2000 mg/kg; Metalaxyl-M

Acute Inhalation LD<sub>50</sub>

> 5.14-Mancozeb; > 2.29 mg/l (4 h): Metalaxyl-M

EYE Irritation (Rabbit)

Irritant – Mancozeb; Slight irritant (rabbits)-Metalaxyl-M

SKIN Irritation (Rabbit)

Not an irritant-Mancozeb; Not an irritant-Metalaxyl-M

Skin Sensitization (Guinea Pig)

Sensitize to Guinea pig skin-Mancozeb, Not a sensitizer-Metalaxyl-M

## 12. ECOLOGICAL INFORMATION

Ecotoxicity: (Assessment largely or completely based on data for active substance)

### Aquatic toxicity:

#### Fish

**Mancozeb:** LC50 (Oncorhynchus mykiss (rainbow trout)): 0,088 mg/l (90h)

**Metalaxyl-M:** LC50 (Oncorhynchus mykiss (rainbow trout)): > 100 mg/l (120h)

#### Algae EC<sub>50</sub> (120 hr)

**Mancozeb:** ErC50 (Raphidocelis subcapitata (freshwater green alga)): 0,032 mg/l

**Metalaxyl-M:** ErC50 (Raphidocelis subcapitata (freshwater green alga)) 271 mg/l (96h)

#### Daphnia EC<sub>50</sub> (48 hr)

**Mancozeb:** EC50 (Daphnia magna (Water flea)): 0,073 mg/l (48h)

**Metalaxyl-M:** EC50 (Daphnia magna (Water flea)): > 100 mg/l (48h)

### Environmental Fate:

#### Persistence and Degradability:

**Mancozeb & Metalaxyl-M:** Not readily biodegradable

#### Bio-accumulation potential:

**Mancozeb** Bio-concentration < 100

**Metalaxyl-M:** 1.71 (25°C)

#### Mobility in soil:

**Mancozeb:** log Pow 1.38

**Metalaxyl-M:** log Pow 1.71

## 13. DISPOSAL CONSIDERATIONS

### Disposal operations:

Do not contaminate water, food or feed by disposal. Wastes resulting from the use of this product may be disposed of at an approved waste disposal facility.

### Disposal of packaging:

Dispose of in a regulated landfill site or other method for hazardous or toxic wastes.

**NB:** The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

## 14. TRANSPORT INFORMATION

### U.S> Department of Transportation (DOT)

#### Bulk

#### UN no:

3077

#### Shipping name:

Mancozeb 64% + Metalaxyl-M 4% WP, Environmentally Hazardous Substance, solid, n.o.s.

#### Hazard Class:

9

#### Packing group: III Land Transport (ADR / RID)

III

#### UN no:

3077

#### Shipping name:

Mancozeb 64% + Metalaxyl-M 4% WP, Environmentally Hazardous Substance, solid, n.o.s.

#### Hazard Class:

9

#### Packing group:

III

### Marine Transport (IMDG / IMO)

#### UN no:

3077

#### Shipping name:

Mancozeb 64% + Metalaxyl-M 4% WP, Environmentally Hazardous Substance, solid, n.o.s.

#### Hazard Class:

9

**SAFETY DATA SHEET**  
**MANCOZEB 64% + METALAXYL-M 4% WP**  
**(MATCO GOLD)**

**Packing group:** III  
**Marine pollutant:** Yes  
**EmS:** F-A, S-F

**Air transport (IATA / ICAO)**

**UN no:** 3077  
**Shipping name:** Mancozeb 64% + Metalaxyl-M 4% WP, Environmentally Hazardous Substance, solid, n.o.s.  
**Hazard Class:** 9  
**Packing group:** III  
**Cargo Packing instructions:**

**15. REGULATORY INFORMATION**

**Safety, health and environmental regulations/legislation specific for the substance or mixture**

This Safety Data Sheet contains no country specific regulatory information. It may not meet the regulatory requirements of a specific country.

**Risk Symbol** : Xi



**Xi - Irritant Risk Phrases**

R36 – Irritating to eyes  
R37 - Irritating to respiratory system.  
R38 – Irritating to skin  
R43 - May cause sensitisation by skin contact

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.

**16. OTHER INFORMATION**

**Legal disclaimer:**

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.