

# MATERIAL SAFETY DATA SHEET

## MANCOZEB 800 WP



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Issued: 22/10/2004  
Revised date: 01.01.2021  
Ref: IIL/MCZ80WP/18

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

<b>Product name:</b>	<b>MANCOZEB 800 WP (Manzidan Indofil)</b>
<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:mkt-icc@modi.com">mkt-icc@modi.com</a> Tel : 0091 22 66637373 Fax: 0091 22 28322275

### 2. HAZARDS IDENTIFICATION

#### 2.1. Classification of the substance or mixture:

##### Classification according to GHS regulation:

**Health Hazard:** Skin Sens. 1, Repr. Cat. 2

**Environmental Hazard:** Aquatic Acute 1 ( M factor-10)  
Aquatic Chronic 2;

#### 2.2. Label elements:

##### Hazard pictograms:



**Signal word:** Warning

##### Hazard Statements:

H317: May cause an allergic skin reaction.

H361d: May damaging the unborn child

H400: Very toxic to aquatic life.

H411: Toxic to aquatic life with long lasting effects.

##### Precautionary Statements:

###### Preventive:

P202: Do not handle until all safety precautions have been read and understood.

P261: Avoid breathing spray.

###### Response:

P302+ P352: IF ON SKIN: Wash with plenty of water & soap.

P308+P313: IF exposed or concerned: Get medical advice/attention.

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P333+P313: If skin irritation or rash occurs: Get medical advice/attention.

P391: Collect spillage.

### Storage:

P405: Store locked up.

### Disposal:

P501: Dispose of contents/container to in accordance with local and national regulations

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical name	CAS	%
Active ingredient (Mancozeb)	8018-01-7	80
Inert ingredients	-----	20

### 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. The vision may become blurred

##### 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.

##### After Ingestion

Do not induce vomiting. Provided the patient is conscious, wash mouth with water and give plenty of water to drink. Consult a physician. The decision of whether to induce vomiting or not should be made by a physician.

##### After eye contact

Flush eyes thoroughly with water for several minutes. Remove contact lenses after initial 1-2 minutes and continue flushing for several additional minutes. If effects occur, consult a physician, preferably an ophthalmologist.

##### 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.

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<b>Exposure hazards:</b>	May form flammable / explosive dust-air mixture. In combustion emits toxic fumes of sulphur Oxides, nitrogen oxides, carbon dioxide / carbon monoxide.
<b>Protection of fire-fighters:</b>	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

<b>Personal precautions:</b>	Eliminate all sources of ignition. Do not create dust.
<b>Environmental precautions:</b>	Do not discharge into drains or rivers. Contain the spillage using bunding.
<b>Clean-up procedures:</b>	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

<b>Handling requirements:</b>	Ensure there is sufficient ventilation of the area. Smoking is forbidden. Use non-sparking tools. When handling do not eat, drink or smoke.
<b>Storage conditions:</b>	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.
<b>Suitable packaging:</b>	Must only be kept in original packaging.

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

<b>Engineering measures:</b>	Ensure there is sufficient ventilation of the area. Ensure lighting and electrical equipment are not a source of ignition.
<b>Respiratory protection:</b>	Wear approved respirator.
<b>Hand protection:</b>	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.
<b>Eye protection:</b>	Safety goggles.
<b>Skin protection:</b>	Mixers and loaders must wear overalls , protective goggles and chemical-resistant apron.

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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

<b>State:</b>	Solid Powder
<b>Colour:</b>	Yellow
<b>Odour:</b>	Sulphurous
<b>Solubility in water:</b>	6.2 ppm (pH 7.5, 25 °C)
<b>Flash point °C:</b>	Not Applicable

### 10. STABILITY AND REACTIVITY

<b>Stability:</b>	Stable under normal conditions.
<b>Conditions to avoid:</b>	Acids and moisture (in storage)
<b>Hazardous decomp. products:</b>	Elevated temperature or free water promotes decomposition, which may cause spontaneous combustion. In combustion emits toxic fumes. In combustion emits toxic fumes of sulphur oxides, carbon dioxide / carbon monoxide, nitrogen oxides.

### 11. TOXICOLOGICAL INFORMATION

<b>Hazardous ingredients:</b>	MANCOZEB
<b><u>Acute toxicity (Assessment largely or completely based on data for active substance)</u></b>	
Acute Oral LD <sub>50</sub> (Rat)	>2000 mg/kg
Acute Dermal LD <sub>50</sub> (Rat)	>2000 mg/kg
Acute Inhalation LD <sub>50</sub>	> 5.14 mg/l
EYE Irritation (Rabbit)	May cause eye irritation.
SKIN Irritation (Rabbit)	Non irritant
Skin Sensitization (Guinea Pig)	sensitizing to Guinea pig skin

### 12. ECOLOGICAL INFORMATION

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

**Aquatic toxicity :** Material is very toxic to aquatic organisms.

**Fish**

LC<sub>50</sub> (96 h,) Rainbow Trout < 1.0,  
Bluegill sunfish < 1.0 mg/l

**Algae** EC<sub>50</sub> (120 hr) *Selenastrum capricornutum* < 1.0 mg /L

**Daphnia** EC<sub>50</sub> (48 hr) EC<sub>50</sub> < 1.0 mg/L

**Bird**

Acute Oral, LD<sub>50</sub> (10 d) Material is practically non-toxic to birds.  
Mallard ducks > 5500 mg/kg

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Acute dietary, LC<sub>50</sub> (8 d)

### Honey Bee

LD<sub>50</sub> (oral)

LD<sub>50</sub> (contact)

### Earthworm

LC<sub>50</sub> (14 d)

Bobwhite quail and mallard ducks > 5200 mg/kg diet.

Material is non-toxic to bees.

> 100 µg/bee;

> 100 µg/bee.

*Eisenia foetida* > 1000 mg/kg soil.

### Environmental Fate

#### Persistence and Degradability:

Half-life in soils is dependent on soil type and conditions and is approximately 6-15 days.

#### Bio-accumulation potential:

Bio-concentration potential is low.

#### Mobility in soil:

Partition coefficient, n-octanol/water (log Pow): 1.38

Potential for mobility in soil is low.

Partition coefficient, soil organic carbon/water (Koc): 1000  
Estimated

## 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:

Environmentally Hazardous Substance, solid, n.o.s. (Mancozeb)

Hazard Class:

9

Packing group:

III

### Land Transport (ADR / RID)

UN no:

3077

Shipping name:

Environmentally Hazardous Substance, solid, n.o.s. (Mancozeb)

Hazard Class:

9

Packing group:

III

### Marine Transport (IMDG / IMO)

UN no:

3077

Shipping name:

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**Hazard Class:** 9  
**Packing group:** III  
**Marine pollutant:** Yes  
**EmS:** F-A, S-F

**Air transport (IATA / ICAO)**

**UN no:** 3077  
**Shipping name:** Environmentally Hazardous Substance, solid, n.o.s. (Mancozeb)  
**Hazard Class:** 9  
**Packing group:** III  
**Cargo Packing instructions:** 956

**15. REGULATORY INFORMATION**

**U.S. Regulation :**

**SARA HAZARD CATEGORY :**

This product has been reviewed according to the EPA "Hazard Categories" promulgated under section 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered under applicable definitions to meet the following categories :

- An immediate health hazard
- A delayed health hazard

**OSHA HAZARD COMMUNICATION STANDARD :**

This Product is a "Hazardous Chemical" as defined by the OSHA Hazard Communicated Standard, 29 CFR 1910.1200.

**Hazardous Products Act Information : CPR Compliance**

This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR).

**Australian Inventory of Chemical Substances (AICS)**

Mancozeb is listed in the Australian Inventory of Chemical Substances (AICS).

This product is classified as a Hazardous Substance under Criteria of Safe Work Australia . Xn: Harmful.

This product is not classified as a Dangerous Good according to the ADG Code.

This product is classified as a Dangerous Good according to the IMDG and IATA.

**European Inventory of Existing Commercial Chemical Substances (EINECS)**

The components of this product are on the EINECS inventory or are exempt from inventory requirements.

**EU Directive 67/548/EEC for classification, packaging and labeling of dangerous substances**

Mancozeb is classified as a Harmful and Dangerous for the environment under the Directive 67/548/EEC

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**Note:** The regulatory information given above only indicates the principal regulations specifically applicable to the product described in the safety data sheet. The user's attention is drawn to the possible existence of additional provisions which complete these regulations. Refer to all applicable national, international and local regulations or provisions.

**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.