

# MATERIAL SAFETY DATA SHEET

## MANCOZEB 80 WP



Page 1 of 6  
Issued: 22/10/2004  
Revised date: 01.08.2022  
Ref: IIL/MCZ80WP/13

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

**Product name:** MANCOZEB 80 WP  
**Use / description of product:** Use as an agricultural/horticultural fungicide  
**Company name:** INDOFIL INDUSTRIES LIMITED  
Kalpataru Square, 4th Floor,  
Kondivita Road, Off. Andheri Kurla Road,  
Andheri (E), Mumbai 400 059, Maharashtra, India  
Tel : 0091 22 66637373  
Fax: 0091 22 28322275

### 2. HAZARDS IDENTIFICATION

**Eye Contact:** May cause slight eye irritation.  
**Skin Contact:** Prolonged contact may cause slight skin irritation.  
**Inhalation:** Prolonged excessive exposure to dust may cause irritation of the upper respiratory tract.  
**Ingestion:** Very low toxicity if swallowed.  
**Effects of long term Exposure:** May cause effect on Thyroid function at high doses.  
**Cancer Information:** Considered to show weak carcinogenic activity.  
**Birth Defects/Developmental Effects:** Toxic to the fetus in laboratory animals at maternally toxic doses.  
**Aquatic organisms :** Very toxic to fish and /or other aquatic organisms

### 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.

# MATERIAL SAFETY DATA SHEET

## MANCOZEB 80 WP



Page 2 of 6  
Issued: 22/10/2004  
Revised date: 01.08.2022  
Ref: IIL/MCZ80WP/13

**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.

# MATERIAL SAFETY DATA SHEET

## MANCOZEB 80 WP



Page 3 of 6  
Issued: 22/10/2004  
Revised date: 01.08.2022  
Ref: IIL/MCZ80WP/13

**Respiratory protection:**

**Hand protection:**

**Eye protection:**

**Skin protection:**

Wear approved respirator.

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.

Safety goggles.

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

<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.

# MATERIAL SAFETY DATA SHEET

## MANCOZEB 80 WP



Page 4 of 6  
Issued: 22/10/2004  
Revised date: 01.08.2022  
Ref: IIL/MCZ80WP/13

### 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

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

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

### Honey Bee

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

Material is non-toxic to bees.

> 100 µg/bee;

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

> 100 µg/bee.

### Earthworm

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

*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

**MATERIAL SAFETY DATA SHEET  
MANCOZEB 80 WP**



Page 5 of 6  
Issued: 22/10/2004  
Revised date: 01.08.2022  
Ref: IIL/MCZ80WP/13

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

# MATERIAL SAFETY DATA SHEET

## MANCOZEB 80 WP



Page 6 of 6  
Issued: 22/10/2004  
Revised date: 01.08.2022  
Ref: IIL/MCZ80WP/13

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

**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.