

SAFETY DATA SHEET

MANCOZEB 64% + CARBENDAZIM 8% WP (COMPANION)

Page 1 of 5
 Issued date: 22.10.2021
 Revised date: 04.08.2023
 Revision No.:01
 Ref: IIL/MCZCAR72WP

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

Product name:	MANCOZEB 64% + CARBENDAZIM 8% WP (COMPANION)
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. Email: customercare@indofil.com Toll Free No.: 1800-120-003-004

2. HAZARDS IDENTIFICATION

GHS Classification
Hazard Symbol



Signal word:
Hazard statement(s):

DANGER

H303 May be harmful if swallowed.
 H317 May cause an allergic skin reaction.
 H335 May cause respiratory irritation.
 H340 May cause genetic defects.
 H360 May damage fertility or the unborn child.
 H373 May cause damage to organs through prolonged or repeated exposure.
 H410 Very toxic to aquatic life with long lasting effects.

P260 Do not breathe dust/ fume/ gas/ mist/ vapors/spray.
 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

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical name	CAS	%
Active ingredient (Mancozeb)	8018-01-7	64
Active ingredient (Carbendazim)	10605-21-7	8
Other ingredients	-----	QS to make up 100

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

SAFETY DATA SHEET
MANCOZEB 64% + CARBENDAZIM 8% WP
(COMPANION)

Page 2 of 5
Issued date: 22.10.2021
Revised date: 04.08.2023
Revision No.:01
Ref: IIL/MCZCAR72WP

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.

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

SAFETY DATA SHEET
MANCOZEB 64% + CARBENDAZIM 8% WP
(COMPANION)Page 3 of 5
Issued date: 22.10.2021
Revised date: 04.08.2023
Revision No.:01
Ref: IIL/MCZCAR72WP

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 vapors.

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 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 overall, 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 Powder

Colour:

Yellow

Odour:

Weak characteristic odour

Solubility in water:

Forms suspension in water

pH

6-9 (1% dispersion)

Flash point °C:

Not Applicable

10. STABILITY AND REACTIVITY

Stability:

Stable under normal conditions.

Conditions to avoid:

Acids and moisture (in storage)

Hazardous decomp. products:

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

Hazardous ingredients:

MANCOZEB and CARBENDAZIM

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

Acute Oral LD₅₀ (Rat)

Mancozeb >5000 mg/kg ; Carbendazim 264 mg/kg (male)

Acute Dermal LD₅₀ (Rat)

>5000 mg/kg-Mancozeb; >4000 mg/kg Carbendazim

Acute Inhalation LD₅₀

> 5.14 mg/l-Mancozeb; > 3.28 mg/l (4h) Carbendazim

Eye Irritation (Rabbit)

May cause eye irritation.

Skin Irritation (Rabbit)

Non irritant

Skin Sensitization (Guinea Pig)

sensitizing to Guinea pig - Mancozeb

12. ECOLOGICAL INFORMATION**Ecotoxicity: (Assessment largely or completely based on data for active substance)****Aquatic toxicity :**

Material is very toxic to aquatic organisms.

FishLC₅₀ (96 h_a)

Rainbow Trout < 1.0-Mancozeb ; 1,3 mg/l-Carbendazim,

Algae EC₅₀ (120 hr)*Selenastrum capricornutum* 0.044 mg.l-Mancozeb; 1.1mg /L
CarbendazimDaphnia EC₅₀ (48 hr)

3,8 mg/L-Mancozeb; 0.006 mg/l-Carbendazim

Bird

Material is practically non-toxic to birds.

Acute Oral, LD₅₀ (10 d)

Mallard ducks > 2179 mg/kg Carbendazim;

Mallard ducks > 5500 mg/kg Mancozeb

Honey Bee

Material is non-toxic to bees.

LD₅₀ (oral)

> 400 µg/bee – Mancozeb (48h)

> 1µg/bee (48h) – Carbendazim

EarthwormLC₅₀ (14 d)*Eisenia foetida* >106-176 mg/kg soil – Carbendazim*Eisenia foetida* >1000 mg/kg soil – Mancozeb**Environmental Fate****Persistence and Degradability:**

Carbendazim: In mammals, carbaryl does not accumulate in body tissues, but is rapidly metabolized to non-toxic substances, particularly 1-naphthol.

Mancozeb: It is rapidly degraded in the environment by hydrolysis, oxidation, photolysis and metabolism. It strongly adsorbed to soil, and half life in soil is 3 to 11 days (clay and loam soil)

Bio-accumulation potential:

Bio-concentration potential is low.

Mobility in soil:

Potential for mobility in soil is low.

13. DISPOSAL CONSIDERATIONS**Disposal operations:**

The product should not be allowed to enter drains, water courses or the soil as per regulations.

Disposal of packaging:

Dispose of in a regulated landfill site or other method for hazardous or toxic wastes. Do not re-use empty containers.

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, Carbendazim)**Hazard Class:**

9

Packing group:

III

Land Transport (ADR / RID)

SAFETY DATA SHEET
MANCOZEB 64% + CARBENDAZIM 8% WP
(COMPANION)Page 5 of 5
Issued date: 22.10.2021
Revised date: 04.08.2023
Revision No.:01
Ref: IIL/MCZCAR72WP

UN no: 3077

Shipping name:

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

Hazard Class:

9

Packing group:

III

Marine Transport (IMDG / IMO)

UN no:

3077

Shipping name:

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

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, Carbendazim)

Hazard Class:

9

Packing group:

III

Cargo Packing instructions:

15. REGULATORY INFORMATION

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
- H302- Harmful if swallowed H361d: Suspected of damaging the unborn child
- H317- May cause an allergic skin reaction
- H400 - Very toxic to aquatic life
- H410 - Very toxic to aquatic life with long-lasting effects
- H401- To avoid risks to human health and the environment, comply with the instructions for use.

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.