



Mancozeb 750 DF

Safety Data Sheet

according to the United Nations GHS (Rev. 7, 2017)

SDS reference: INDIA

Issue date: 12/6/2021 Revision date: 3/2/2022 Supersedes: 12/6/2021 Version: 2.0

SECTION 1: Identification

1.1. GHS Product identifier

Product form : Mixture
Name : Mancozeb 750 DF
Synonyms : Penncozeb 75 DF
Manzate 75 DF
Penncozeb 750 WG
Zenith 75 DF

1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

Use of the substance/mixture : Fungicide

1.4. Supplier's details

UPL Limited
CTS No. 610 B/2, Bandra Village,
Off Western Express Highway, Behind Teacher's Colony,
IN- Bandra (East) Mumbai, 400051 – Maharashtra
India
T +91-(022) 7152 8000

1.5. Emergency phone number

Emergency number : This SDS is listed with CHEMTREC. Country specific CHEMTREC emergency numbers stated below are operational 24X7.

| Country | Organisation/Company | Emergency number | Comment |
|-------------|----------------------|---------------------|--------------|
| India | CHEMTREC | 000 800 1007 141 | Toll Free |
| China | CHEMTREC | 400 120 4937 | Local Number |
| Hong Kong | CHEMTREC | 800 968 793 | Toll Free |
| Japan | CHEMTREC | 0800-300-5842 | Toll Free |
| Malaysia | CHEMTREC | +60 3-9212 5794 | Local Number |
| Malaysia | CHEMTREC | 1-800-81-5308 | Toll Free |
| Philippines | CHEMTREC | +63 2 8 395 3308 | Local Number |
| Philippines | CHEMTREC | 1800 1 116 1020 | Toll Free |
| Taiwan | CHEMTREC | +886 2 7741 4207 | Local Number |
| Taiwan | CHEMTREC | 00801-14-8954 | Toll Free |
| Thailand | CHEMTREC | 001-800-13-203-9987 | Toll Free |

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

Classification according to the United Nations GHS

Reproductive toxicity, Category 2

H361

Hazardous to the aquatic environment — Acute Hazard, Category 1

H400

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Full text of H-statements: see section 16

Adverse physicochemical, human health and environmental effects

: To our knowledge, this product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice

2.2. GHS Label elements, including precautionary statements

Labelling according to the United Nations GHS

Hazard pictograms (GHS UN)

:



Signal word (GHS UN)

: Warning

Hazard statements (GHS UN)

: H361 - Suspected of damaging the unborn child.

H400 - Very toxic to aquatic life

Precautionary statements (GHS UN)

: P201 - Obtain special instructions before use.

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

P273 - Avoid release to the environment.

P280 - Wear protective clothing, eye protection, face protection.

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

P391 - Collect spillage.

P405 - Store locked up.

P501 - Dispose of contents and container to an approved waste disposal plant, hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards which do not result in classification

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

| Name | Product identifier | % |
|----------|--------------------|-------|
| Mancozeb | CAS-No.: 8018-01-7 | 88.23 |

Full text of H-statements: see section 16

SECTION 4: First-aid measures

4.1. Description of necessary first-aid measures

First-aid measures general

: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation

: Remove person to fresh air and keep comfortable for breathing. Allow affected person to breathe fresh air. Allow the victim to rest.

First-aid measures after skin contact

: Wash skin with plenty of water. Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.

First-aid measures after eye contact

: Rinse eyes with water as a precaution. Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists.

First-aid measures after ingestion

: Call a poison center or a doctor if you feel unwell. Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

4.2. Most important symptoms/effects, acute and delayed

Symptoms/effects

: Not expected to present a significant hazard under anticipated conditions of normal use.

Potential adverse human health effects and symptoms

: Based on available data, the classification criteria are not met.

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4.3. Indication of immediate medical attention and special treatment needed, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide. Sand.
Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Special protective actions for fire-fighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.
Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing. Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection". Equip cleanup crew with proper protection.
Emergency procedures : Ventilate area.

6.2. Environmental precautions

Avoid release to the environment. Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and materials for containment and cleaning up

Methods for cleaning up : Mechanically recover the product. On land, sweep or shovel into suitable containers. Minimise generation of dust. Store away from other materials.
Other information : Dispose of materials or solid residues at an authorized site.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour.
Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place. Keep cool. Keep only in the original container in a cool, well ventilated place away from : Keep container closed when not in use.
Incompatible products : Strong bases. Strong acids.
Incompatible materials : Sources of ignition. Direct sunlight.

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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.
Environmental exposure controls : Avoid release to the environment.
Other information : Do not eat, drink or smoke during use.

8.3. Individual protection measures, such as personal protective equipment (PPE)

Hand protection : Protective gloves. Wear protective gloves.
Eye protection : Safety glasses. Chemical goggles or safety glasses
Skin and body protection : Wear suitable protective clothing
Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment. Wear appropriate mask

Personal protective equipment symbol(s)



8.4. Exposure limit values for the other components

No additional information available

SECTION 9: Physical and chemical properties

9.1. Basic physical and chemical properties

Physical state : Solid
Appearance : Yellowish olive Brown free flowing granules
Colour : Yellowish to brown
Odour : odourless.
Odour threshold : Not available
Melting point : Not available
Freezing point : Not applicable
Boiling point : Not available
Flammability (solid, gas) : Not flammable, Non flammable.
Explosive limits : Not applicable
Lower explosive limit (LEL) : Not applicable
Upper explosive limit (UEL) : Not applicable
Flash point : Not applicable
Auto-ignition temperature : Not applicable
Decomposition temperature : Not available
pH : 7.59
pH solution : Not available
Viscosity, kinematic (calculated value) (40 °C) : Not applicable
Partition coefficient n-octanol/water (Log Kow) : Not available
Vapour pressure : Not available
Vapour pressure at 50 °C : Not available
Density : 0.56 g/ml Pour density
Relative density : Not available
Relative vapour density at 20 °C : Not applicable
Solubility : Not available
Particle size : Not available
Particle size distribution : Not available
Particle shape : Not available
Particle aspect ratio : Not available

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Particle specific surface area : Not available

9.2. Data relevant with regard to physical hazard classes (supplemental)

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions. Not established.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use. Not established.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7). Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced. fume. Carbon monoxide. Carbon dioxide, Carbon monoxide, Carbon dioxide, Nitrogen oxides (NOx), Oxides of sulfur, Carbon disulphide, Hydrogen sulphide, Ethylenethiourea

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified.

Acute toxicity (dermal) : Not classified

Acute toxicity (inhalation) : Not classified.

| Mancozeb 750 DF | |
|-----------------------|-----------------------------|
| LD50 oral rat | > 5000 mg/kg |
| LD50 oral | > 2000 mg/kg Japanese quail |
| LC50 Inhalation - Rat | 5.282 mg/l |
| ATE UN (vapours) | 5.282 mg/l/4h |
| ATE UN (dust,mist) | 5.282 mg/l/4h |

| Mancozeb (8018-01-7) | |
|-----------------------|--------------|
| LD50 oral rat | ≥ 5000 mg/kg |
| LD50 dermal rat | ≥ 5000 mg/kg |
| LC50 Inhalation - Rat | ≥ 5.14 mg/l |

Skin corrosion/irritation : Slightly irritant but not relevant for classification
pH: 7.59

Serious eye damage/irritation : Slightly irritant but not relevant for classification
pH: 7.59

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

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| Mancozeb (8018-01-7) | |
|---|---|
| Additional data | NOAEL, rat: 125 ppm (4.8 kg bw/g) Not carcinogenic |
| Reproductive toxicity | : Suspected of damaging the unborn child. |
| STOT-single exposure | : Not classified |
| Mancozeb (8018-01-7) | |
| Additional information | Not classified |
| STOT-repeated exposure | : Not classified |
| Mancozeb (8018-01-7) | |
| Additional information | Not classified |
| Aspiration hazard | : Not classified |
| Mancozeb 750 DF | |
| Viscosity, kinematic | Not applicable |
| Potential adverse human health effects and symptoms | : Based on available data, the classification criteria are not met. |

SECTION 12: Ecological information

12.1. Toxicity

| | |
|---|-------------------------------|
| Hazardous to the aquatic environment, short-term (acute) | : Very toxic to aquatic life. |
| Classification procedure (Hazardous to the aquatic environment, short-term (acute)) | : Calculation method |
| Hazardous to the aquatic environment, long-term (chronic) | : Not classified |

| Mancozeb (8018-01-7) | |
|----------------------|--|
| LC50 - Fish | < 1 mg/l (96h <i>Salmo gairdneri</i>) |
| EC50 - Crustacea | < 1 mg/l (48h <i>Daphnia magna</i>) |
| ErC50 algae | < 1 mg/l (72h <i>Selenastrum capricornutum</i>) |

12.2. Persistence and degradability

| Mancozeb 750 DF | |
|-------------------------------|----------------------------|
| Persistence and degradability | Not established. |
| Mancozeb (8018-01-7) | |
| Persistence and degradability | Not readily biodegradable. |

12.3. Bioaccumulative potential

| Mancozeb 750 DF | |
|---|------------------|
| Bioaccumulative potential | Not established. |
| Mancozeb (8018-01-7) | |
| Partition coefficient n-octanol/water (Log Kow) | 1.38 |

12.4. Mobility in soil

| Mancozeb 750 DF | |
|------------------|-------------------------------------|
| Mobility in soil | No additional information available |

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12.5. Other adverse effects

Ozone : Not classified
Other adverse effects : No additional information available
Other information : Avoid release to the environment.



SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.
Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.
Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

In accordance with IMDG / IATA

| IMDG | IATA |
|---|---|
| 14.1. UN number | |
| 3077 | 3077 |
| 14.2. UN Proper Shipping Name | |
| ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Mancozeb) | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Mancozeb) |
| 14.3. Transport hazard class(es) | |
| 9 | 9 |
|  |  |
| 14.4. Packing group | |
| III | III |
| 14.5. Environmental hazards | |
| Dangerous for the environment : Yes Marine pollutant : Yes | Dangerous for the environment : Yes |
| No supplementary information available | |

14.6. Special precautions for user

IMDG

Special provisions (IMDG) : 274, 335, 966, 967, 969
Limited quantities (IMDG) : 5 kg
Excepted quantities (IMDG) : E1
Packing instructions (IMDG) : LP02, P002
Special packing provisions (IMDG) : PP12
IBC packing instructions (IMDG) : IBC08
IBC special provisions (IMDG) : B3
Tank instructions (IMDG) : BK1, BK2, BK3, T1
Tank special provisions (IMDG) : TP33
EmS-No. (Fire) : F-A - FIRE SCHEDULE Alfa - GENERAL FIRE SCHEDULE
EmS-No. (Spillage) : S-F - SPILLAGE SCHEDULE Foxtrot - WATER-SOLUBLE MARINE POLLUTANTS

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Stowage category (IMDG) : A

IATA

PCA Excepted quantities (IATA) : E1
PCA Limited quantities (IATA) : Y956
PCA limited quantity max net quantity (IATA) : 30kgG
PCA packing instructions (IATA) : 956
PCA max net quantity (IATA) : 400kg
CAO packing instructions (IATA) : 956
CAO max net quantity (IATA) : 400kg
Special provisions (IATA) : A97, A158, A179, A197, A215
ERG code (IATA) : 9L

14.7. Transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations specific for the product in question

No additional information available

SECTION 16: Other information

Issue date : 06/12/2021
Revision date : 02/03/2022
Supersedes : 06/12/2021

Other information : None.

| Full text of H-statements: | |
|----------------------------|---|
| H302 | Harmful if swallowed |
| H303 | May be harmful if swallowed |
| H313 | May be harmful in contact with skin |
| H361 | Suspected of damaging fertility or the unborn child |
| H400 | Very toxic to aquatic life |
| H412 | Harmful to aquatic life with long lasting effects |

Safety Data Sheet (SDS), UN

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.