

Safety Data Sheet

MANZATE 75 WG

Preparation Date 22-Nov-2011

Revision date 04-Jan-2017

Revision Number: 3

1. Identification of the substance/mixture and of the company/undertaking

1.1 Identification of the product

| Product code | FBX02 |
|----------------------------|-----------------|
| Product Description: | MANZATE 75 WG |
| Synonyms | Mancozeb 75% WG |
| Pure substance/preparation | Preparation |

1.2 Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

| Recommended use | Fungicide |
|-----------------|-----------|
| | |

Sector(s) of useAgricultural applications.1.3 Details of the Supplier of the Safety Data Sheet

Supplier

UPL Europe Ltd The Centre Birchwood Park Warrington WA3 6YNCheshire UK Tel. : +44 (0) 1925 819999 Fax : +44 (0) 1925 856075 info.uk@uniphos.com

E-mail address

1.4 Emergency Telephone Number

Emergency telephone number(CARECHEM 24): +44 (0) 1235 239670United KingdomNHS no. 111

2. Hazards Identification

2.1 Classification of the mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

| Human Health | |
|---|---|
| Skin sensitization Reproductive toxicity | Category 1 - H317 Category 2 - H361d |
| , | 6 , |

Environment Acute aquatic toxicity

Category 1 - H400

For the full text of the H-Statements mentioned in this Section, see Section 16

2.2 Label elements

Labeling according to Regulation (EC) No. 1272/2008 [CLP]



Signal Word

WARNING

Hazard Statements

H317 - May cause an allergic skin reaction H361d - Suspected of damaging the unborn child H400 - Very toxic to aquatic life

Precautionary Statements - EU (§28, 1272/2008)

- P261 Avoid breathing dust/fume/gas/mist/vapors/spray
- P273 Avoid release to the environment
- P280 Wear protective gloves and protective clothing
- P333 + P313 If skin irritation or rash occurs: Get medical advice/attention
- P308 + P313 IF exposed or concerned: Get medical advice/attention
- P501 Dispose of contents/ container to an approved waste disposal plant
- or collection site except for empty clean containers which can be disposed of as non-hazardous waste
- Sp1 Do not contaminate water with the product or its container. Do not clean application equipment near surface water. Avoid contamination via drains from farmyards and roads.

EU Specific Hazard Statements

2.3 Other Hazards

No information available

3. Composition/information on Ingredients

3.2. MIXTURES

| Chemical name | EC No | CAS-No | Weight % | Classification (Dir.67/548) | EU - GHS Substance Classification | REACH No. |
|---------------|-------|-----------|----------|--------------------------------|--|-------------------|
| Mancozeb | - | 8018-01-7 | 70 - 80 | - | Skin Sens. 1 (H317) Repr. 2 (H361d) Aquatic Acute 1 (H400) | no data available |

For the full text of the H-Statements mentioned in this Section, see Section 16

4. First aid measures

4.1 Description of first-aid measures

| General advice | In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible) |
|----------------|--|
| Eye contact | IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing If eye irritation persists, consult a specialist |
| Skin contact | Wash off immediately with plenty of water If symptoms persist, call a physician |
| Ingestion | Rinse mouth with water Call a POISON CENTER or doctor if you feel unwell |
| Inhalation | Move to fresh air Call a POISON CENTER or doctor if you feel unwell |

4.2 Most Important Symptoms and Effects, Both Acute and Delayed

No information available

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

5. Fire-fighting measures

5.1 Extinguishing media

| Suitable extinguishing media | Water spray Use water spray or fog; do not use straight streams Dike fire-control water for later disposal | | |
|---|--|--|--|
| Unsuitable extinguishing media | Do not use a solid water stream as it may scatter and spread fire | | |
| 5.2 Special hazards arising from the substance or mixture | | | |

Special Hazard

Thermal decomposition can lead to release of irritating gases and vapors Carbon disulphide Carbon oxides Nitrogen oxides (NOx) Hydrogen sulphide

5.3 Advice for Firefighters

In the event of fire, wear self contained breathing apparatus Use personal protection equipment Avoid runoff to waterways and sewers

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Evacuate personnel to safe areas Avoid contact with skin and eyes Avoid dust formation Use personal protective equipment Wear protective gloves/protective clothing and eye/face protection

6.2 Environmental Precautions

Prevent product from entering drains Do not allow material to contaminate ground water system

6.3 Methods and material for containment and cleaning up

Sweep up and shovel into suitable containers for disposal

7. Handling and Storage

7.1 Precautions for Safe Handling

Handling

Avoid dust formation in confined areas Remove and wash contaminated clothing before re-use Avoid contact with skin and eyes Do not eat, drink or smoke when using this product

Hygiene Measures

Use only outdoors or in a well-ventilated area

7.2 Conditions for safe storage, including any incompatibilities

Maintain air gap between stacks/pallets Keep away from food, drink and animal feeding stuffs Decomposes by reaction with strong acids.

7.3 Specific end uses

No information available.

8. Exposure Controls/Personal Protection

8.1 Control Parameters

Exposure Limits

Apply technical measures to comply with the occupational exposure limits

| Chemical name | Eu | United Kingdom | France | Spain | Germany |
|-------------------------|----------|-------------------------|---------------------|-------|---------|
| Mancozeb | | | 5 mg/m ³ | | |
| Derived No Effect Level | (DNEL) N | o information available | | | |

Predicted No Effect Concentration No information available (PNEC)

8.2 Exposure Controls

Engineering controls Ensure adequate ventilation, especially in confined areas

Personal Protective Equipment

| Eye protection Skin protection Hand protection Respiratory protection | Safety glasses with side-shields. Long sleeved clothing. Nitril/Nylon EN388 4121, EN 374-2003 JKL (Thickness 0.5 mm) Permeability > 480 min. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators |
|--|--|
|--|--|

Environmental exposure controls No information available

9. Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

| Appearance Physical state | Greyish-yellow solid Free flowing microgranules | |
|---------------------------------------|---|--|
| Odor | Woody | |
| Property | VALUES | Remarks/ Method |
| pH | 6.5-7.5 | CIPAC MT 75 (1% aq) |
| Melting point/freezing point | No information available | Decomposes without melting. |
| Boiling Point/Range | No information available | |
| Flash Point | No information available | |
| Flammability (solid, gas) | Not highly flammable | CE A.10 |
| vapor pressure | <5.6 x 10 ⁻⁷ hPa (25 °C) | |
| Bulk density | 0.65 kg/l | Pour density / Tap density 0.62 kg/l / 0.68 kg/l |
| Water solubility | dispersible | |
| Solubility in Other Solvents | Practically insoluble | |
| Partition coefficient: n-octanol/wate | erNo information available | |
| Autoignition temperature | 156 °C | CE A.16 |
| Decomposition temperature | No information available | |
| Viscosity | No information available | |
| Oxidizing properties | The substance or mixture is not classi | 0 |
| Explosive properties | According to the chemical structure no | o explosion reaction is expected |

9.2 OTHER INFORMATION

VOC Content

No information available

10. Stability and Reactivity

10.1 Reactivity

None under normal use.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

None under normal processing.

10.4 Conditions to avoid

Do not store near strong acids Keep away from children Keep away from heat and sources of ignition Avoid dust formation

10.5 Incompatible Materials

Alkaline Strong acids Strong oxidizing agents Quaternary ammonium salts Sequestring agents

10.6 Hazardous Decomposition Products

Carbon oxides Nitrogen oxides (NOx) Oxides of sulfur Carbon disulphide Hydrogen sulphide Ethylenethiourea

11. Toxicological Information

11.1 Information on Toxicological Effects

Acute toxicity

| Local effects Inhalation Eye contact Skin contact Ingestion | |
|---|--|
| LD50 Oral LD50 Dermal LC50 Inhalation | > 5000 mg/kg (rat) > 2000 mg/kg (rabbit) 4.8 mg/L (4-hr) (rat) |
| Chronic toxicity | |
| Skin Corrosion/Irritation | No skin irritation. |
| Eye damage/irritation | No eye irritation. |
| Sensitization | Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. |
| Carcinogenic effects | Did not show carcinogenic effects in animal experiments |
| Mutagenic effects | NOAEL = 60 mg/kg |
| Reproductive effects | NOAEL = 150 mg/kg |
| STOT - Single Exposure | No information available. |
| STOT - Repeated Exposure | No information available. |

12. Ecological Information

12.1 Toxicity

EC50/72h/algae = 1.18 mg/l LC50/48h/daphnia = 0.47 mg/l LC50/fish/96 h = 0.2 mg/l

12.2 Persistence and Degradability

No information available

12.3 Bioaccumulative Potential

Does not bioaccumulate

| Chemical name | Log Pow |
|---------------|---------|
| Mancozeb | 1.38 |

12.4 Mobility in Soil

No information available.

12.5 Results of PBT and vPvB Assessment

This substance is not considered to be persistent, bioaccumulating nor toxic (PBT)

This substance is not considered to be very persistent nor very bioaccumulating (vPvB)

12.6 Other Adverse Effects

No information available.

| Chemical name | EU - Endocrine Disrupters Candidate List | EU - Endocrine Disruptors - Evaluated Substances |
|---------------|---|---|
| Mancozeb | Group III Chemical | |

13. Disposal Considerations

13.1 Waste Treatment Methods

| Waste from Residues/Unused Products | Dispose of in accordance with local regulations. |
|--|--|
| Contaminated packaging | Empty containers should be taken for local recycling, recovery or waste disposal. |
| EWC waste disposal No | 020108 - agrochemical waste containing dangerous substances. |
| OTHER INFORMATION | According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. |

14. Transport Information

| ADR/RID 14.1 UN-No 14.2 Proper shipping name 14.3 Hazard class 14.4 Packing group 14.5 Environmental Hazard 14.6 Special Provisions IMDG/IMO 14.1 UN-No | UN3077 Environmentally hazardous substance, solid, n.o.s. (Mancozeb) 9 III Yes 274, 335, 375, 601 UN3077 |
|---|--|
| 14.2 Proper shipping name | Environmentally hazardous substances, solid n.o.s. (Mancozeb) |
| 14.3 Hazard class | 9 |
| 14.4 Packing group | III |
| 14.5 Environmental Hazard | Marine pollutant |
| 14.6 Special Provisions | 274, 335, 966, 967, 969 |
| IATA/ICAO | |
| 14.1 UN-No | UN3077 |
| 14.2 Proper shipping name | Environmentally hazardous substances, solid n.o.s. (Mancozeb) |
| 14.3 Hazard class | 9 |
| 14.4 Packing group | |
| 14.5 Environmental Hazard | Yes |
| 14.6 Special Provisions | A97, A158, A179, A197 |
| | |

15. Regulatory Information

15.1 Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture

Registration n°

MAPP 15052

- To avoid risks to man and the environment, comply with the instructions for use

International Inventories

| TSCA EINECS/ ELINCS | Complies Complies |
|---------------------------|----------------------|
| DSL/NDSL | Complies |
| PICCS | Complies |
| ENCS | Complies |
| China | - |
| AICS | Complies |
| KECL | Complies |

Legend

 TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

 DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

 EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

 PICCS - Philippines Inventory of Chemicals and Chemical Substances

 ENCS - Japan Existing and New Chemical Substances

 IECSC - China Inventory of Existing Chemical Substances

 AICS - Australian Inventory of Chemical Substances

 KECL - Korean Existing and Evaluated Chemical Substances

15.2 Chemical safety assessment

A chemical safety assessment has not been carried out.

16. Other Information

Full text of R-phrases referred to under sections 2 and 3

R43 - May cause sensitization by skin contact

R50 - Very toxic to aquatic organisms

R63 - Possible risk of harm to the unborn child

R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

Full text of H-Statements referred to under sections 2 and 3

H317 - May cause an allergic skin reaction H361d - Suspected of damaging the unborn child H400 - Very toxic to aquatic life

Revision date 04-Jan-2017

Revision note Sections updated: 1.4 Emergency Telephone Number

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

Disclaimer

The information contained is based on our knowledge of the product at the date of publishing.

It applies to the PRODUCT AS SUCH. In case of formulation or mixture, make sure that a new danger will not appear.

Users are advised of possible additional hazards when the product is used in applications for which it was not intended.

This sheet shall only be used and duplicated for prevention and Safety purposes.

For rates and use recommendations, refer to the information displayed on the packaging.

It is the responsability of the handlers of the product to pass on this safety data sheet to any subsequent persons who will come into contact with the product.

End of Safety Data Sheet