Safety Data Sheet

This safety data sheet was created pursuant to the requirements of:
Regulation (EC) No. 1907/2006

PENNCOZEB 80 WP

Preparation Date 22-Nov-2011 **Revision date** 12-Sep-2019 **Revision Number:** 2

Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Identification of the product

Product code	FBX01
Product Description	PENNCOZEB 80 WP
Formulation	Mancozeb 80% WP
Synonyms	-
Pure substance/preparation	Preparation

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

Recommended use	Fungicides
Sector(s) of use	SU1 - Agriculture, forestry, fishery
Product category	PC27 - Plant protection products

1.3 Details of the Supplier of the Safety Data Sheet

Supplier	UPL Europe Ltd Engine Rooms Birchwood Park Warrington WA3 6YN Cheshire UK Tel. : +44 (0) 1925 819999 Fax : +44 (0) 1925 856075
E-mail address	sds.info@upl-ltd.com

1.4 Emergency Telephone Number

Emergency Telephone	(CARECHEM 24): +44 (0) 1235 239670
United Kingdom	NHS no. 111

Section 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

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

Skin sensitization	Category 1 - (H317)
Reproductive Toxicity	Category 2 - (H361d)
Acute aquatic toxicity	Category 1 - (H400)

Additional information
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
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 in accordance with national regulation

EU Specific Hazard Statements
EUH401 - To avoid risks to human health and the environment, comply with the instructions for use

2.3 Other Hazards

No information available

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

Chemical name	CAS No	EC No	Index-No.	REACH No.	Weight-%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Mancozeb	8018-01-7	616-995-5	006-076-00-1	-	70 - 80	Skin Sens. 1 (H317) Repr. 2 (H361d) Aquatic Acute 1 (H400)
Methenamine	100-97-0	202-905-8	612-101-00-2	01-2119474895-20	< 1	Flam. Sol. 2 (H228) Skin Sens. 1 (H317)

Full text of H- and EUH-phrases: see section 16

Section 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)

Inhalation
• Move to fresh air
• Call a POISON CENTER or doctor if you feel unwell

Eye contact
• IF IN EYES: Rinse cautiously 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

Self-protection of the first aider
• First aider: Pay attention to self-protection

4.2 Most Important Symptoms and Effects, Both Acute and Delayed

Symptoms
• **Mancozeb:** Signs and symptoms of excessive exposure may be :
• In case of skin contact : May cause sensitization by skin contact, rash
• In case of inhalation : May cause respiratory irritation
• In case of prolonged and excessive exposure, systemic effects, namely (subclinical) decrease in thyroid hormone levels and neurological signs may occur
• One case of extensive large blisters at body surface and internal mucous membranes (toxic epidermal necrolysis: TEN) has been described after exposure to mancozeb

4.3 Indication of Any Immediate Medical Attention and Special Treatment Needed

Note to physicians
• Treat symptomatically
• In the rare event of toxic epidermal necrolysis (TEN) occurring after exposure to mancozeb, immediate treatment at an Intensive Care Unit (ICU) or burn unit is necessary
• In case of history of excessive exposure (either dermal or respiratory) bio monitoring is recommended by means of analysis of ETU/creatinine ratio in urine

Section 5: FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable Extinguishing Media
• 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

Specific hazards arising from the chemical
• Thermal decomposition giving flammable and toxic products.
• Carbon disulphide
• Carbon oxides
• Hydrogen sulphide
• Nitrogen oxides (NOx)

Hazardous combustion products
• No information available

5.3 Advice for Firefighters

• Wear self-contained breathing apparatus and protective suit
• Avoid runoff to waterways and sewers

Section 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Personal Precautions

• Avoid contact with skin and eyes
• Wear protective gloves/protective clothing and eye/face protection

Emergency procedures

• Evacuate personnel to safe areas

Emergency responder

• Use personal protective equipment as required
• Evacuate personnel to safe areas

6.2 Environmental Precautions

• Prevent further leakage or spillage if safe to do so
• Do not allow material to contaminate ground water system
• Do not flush into surface water or sanitary sewer system

6.3 Methods and material for containment and cleaning up

Methods for containment

• Prevent further leakage or spillage if safe to do so

Methods for cleaning up

• Take up mechanically, placing in appropriate containers for disposal

Prevention of secondary hazards

• Clean contaminated objects and areas thoroughly observing environmental regulations

6.4 Reference to other sections

• No information available

Section 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Advice on safe handling
• Provide appropriate exhaust ventilation at places where dust is formed
• Use only outdoors or in a well-ventilated area
• Wear protective gloves/protective clothing and eye/face protection
• Ensure that eyewash stations and safety showers are close to the workstation location

General hygiene considerations
• Do not eat, drink or smoke when using this product
• Keep away from food, drink and animal feeding stuffs
• Avoid contact with skin and eyes
• Wash hands before breaks and immediately after handling the product
• Remove contaminated clothing and protective equipment before entering eating areas

7.2 Conditions for safe storage, including any incompatibilities

• Maintain air gap between stacks/pallets
• Do not store near strong acids
• Keep away from food, drink and animal feeding stuffs

7.3 Specific end uses

• Fungicides
• Please refer to the product labeling and packaging for information about appropriate use

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control Parameters

Exposure Limits

Chemical name	Eu	United Kingdom	France	Spain	Germany
Mancozeb 8018-01-7	-	-	5 mg/m³	-	-
Chemical name	**Austria**	**Switzerland**	**Poland**	**Norway**	**Ireland**
Methenamine 100-97-0	-	-	TWA: 4 mg/m³	TWA: 3 mg/m³ STEL: 6 mg/m³	-

8.2 Exposure Controls

Engineering controls
• Ensure adequate ventilation, especially in confined areas

Personal Protective Equipment

Eye/face protection
• Safety glasses with side-shields
• Eye protection must conform to standard EN 166

Hand protection
• Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.
Wash gloves when contaminated. Dispose of when contaminated inside, when perforated or when contamination on the outside cannot be removed.
Wash hands frequently and always before eating, drinking, smoking or using the toilet.
• Gloves must conform to standard EN 374
• Material : Nitrile rubber
• Rate of permeability : > 480 min
• Glove thickness : > 0,4 mm

Skin and body protection
• Wear standard coveralls and Category 3 Type 5 suit.
If there is a risk of significant exposure, consider a higher protective type suit.
Wear two layers of clothing wherever possible. Polyester/cotton or cotton overalls should be worn under chemical protection suit and should be professionally laundered frequently.

Respiratory protection
• When workers are facing concentrations above the exposure limit they must use appropriate certified respirators
Recommended filter type: P2

General hygiene considerations
• Handle in accordance with good industrial hygiene and safety practice

Environmental exposure controls
• Local authorities should be advised if significant spillages cannot be contained
• Do not allow into any sewer, on the ground or into any body of water
• Prevent product from entering drains

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	Greyish-yellow
Physical state	solid , powder
Odor	fishy

Property	VALUES	Remarks/ Method
pH	6.5-7.5	CIPAC MT 75.3 (1% aq)
Melting point/freezing point	No information available	Decomposes without melting.
Boiling Point/Range	Not applicable	
Flash Point	Not Applicable	
Flammability (solid, gas)	Not highly flammable	EC A.10, EC A.12
Relative Density	0.40 g/mL	Pour density, CIPAC MT 169
Bulk density	0.59 kg/l	Tap density, CIPAC MT 169
Water solubility	dispersible	
Solubility in Other Solvents	Practically insoluble	
Partition coefficient: n-octanol/water	No information available	
Autoignition temperature	152 °C	EC A.16
Decomposition temperature	No information available	
Viscosity	Not Applicable	
Oxidizing properties	Non oxidizing	Theoretical assessment
Explosive properties	According to the chemical structure no explosion reaction is expected	EC A.14

9.2 OTHER INFORMATION

VOC Content	No information available

Section 10: STABILITY AND REACTIVITY

10.1 Reactivity

• None under normal use conditions

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 out of reach of children
• Avoid dust formation
• Keep away from open flames, hot surfaces and sources of ignition

10.5 Incompatible Materials

• Alkaline
• Strong acids
• Strong oxidizing agents
• Quaternary ammonium salts
• Sequestring agents

10.6 Hazardous Decomposition Products

• Nitrogen oxides (NOx)
• Carbon oxides
• Hydrogen sulfide
• Oxides of sulfur
• Carbon disulfide
• Ethylenethiourea

Section 11: TOXICOLOGICAL INFORMATION

11.1 Information on Toxicological Effects

Acute toxicity

Component Information

Chemical name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Mancozeb	LD50 > 5000 mg/kg (rat)	LD50 > 2000 mg/kg (rabbit)	LC50 5.2 mg/l (4h) (rat)

Skin corrosion/irritation
• No skin irritation

Serious eye damage/eye irritation
• No eye irritation

Respiratory or skin sensitization
• Repeated or prolonged skin contact may cause allergic reactions with susceptible persons

Germ cell mutagenicity
• NOAEL = 60 mg/kg oral rats

Carcinogenicity
• Did not show carcinogenic effects in animal experiments

Reproductive toxicity
• NOAEL = 150 mg/kg oral rats

Specific target organ toxicity (single exposure)
• No information available

Specific target organ toxicity (repeated exposure)
Mancozeb: • Not classified

Aspiration hazard
Mancozeb: • Not classified

Section 12: ECOLOGICAL INFORMATION

12.1 Toxicity

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

12.2 Persistence and Degradability

• **Mancozeb:** : Readily biodegradable

12.3 Bioaccumulative Potential

Chemical name	Log Pow
Mancozeb	1.38

12.4 Mobility in Soil

• **Mancozeb:** Not mobile

12.5 Results of PBT and vPvB Assessment

• **Mancozeb:** : 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

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

Section 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

Section 14: TRANSPORT INFORMATION

14.1 UN Number
- *ADR, IMDG, IATA :* UN3077

14.2 UN proper shipping name
- *ADR :* Environmentally hazardous substance, solid, n.o.s. (Mancozeb)
- *IMDG :* Environmentally hazardous substances, solid n.o.s. (Mancozeb)
- *IATA :* Environmentally hazardous substances, solid n.o.s. (Mancozeb)

14.3 Transport Hazard Class(es)

Hazard class
- ADR, IMDG, IATA : 9

Subsidiary class
- ADR, IMDG, IATA : Not applicable

14.4 Packing Group
- ADR, IMDG, IATA : III

14.5 Environmental Hazards
- *ADR, IATA :* Yes
- IMDG : Marine pollutant

14.6 Special Precautions for User

Special Provisions
- ADR : 274, 335, 375, 601
- IMDG : 274, 335, 966, 967, 969
- IATA : A97, A158, A179, A197

14.7 Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC CODE
- Not applicable

Section 15: REGULATORY INFORMATION

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

Registration n° MAPP 16953

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

15.2 Chemical safety assessment

- A chemical safety assessment has not been carried out

Section 16: OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3
• H228 - Flammable solid
• H302 - Harmful if swallowed
• H317 - May cause an allergic skin reaction
• H361d - Suspected of damaging the unborn child
• H400 - Very toxic to aquatic life

Classification procedure
• On basis of test data
• Calculation method

Abbreviations and acronyms
• CLP : Classification, Labelling and Packaging = Regulation (EC) No 1272/2008
• CAS : Chemical Abstracts Service
• EC No : EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
• LDx : Lethal dose to x %
• LCx : Lethal concentration to x %
• ECx : Effective concentration to x %
• CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)
• Persistent, Bioaccumulative, and Toxic (PBT) Chemicals
• Very Persistent and very Bioaccumulative (vPvB) Chemicals
• EWC : European Waste Catalogue
• ADR : European Agreement concerning the International Carriage of Dangerous Goods by Road
• IMDG : International Maritime Dangerous Goods Code
• IATA : International Air Transport Association

Preparation Date	22-Nov-2011
Revision date	12-Sep-2019
Reason for revision	New formatting

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006 + Commission Regulation (EU) No 2015/830 of 28 May 2015

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