

NAUTILE DG

Preparation Date 14-Jul-2014

Revision date 12-Dec-2014

Revision Number: 3

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

1.1 Identification of the product

Product code FAZ02
Product Description: NAUTILE DG
Synonyms Cymoxanil/Mancozeb 5/68% WG
Pure substance/preparation Preparation

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

Recommended use Fungicide
Uses advised against Non labeled activities.

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
E-mail address info.uk@uniphos.com

1.4 Emergency Telephone Number

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

2. Hazards Identification

2.1 Classification of the mixture

Classification according to EU Directives 67/548/EEC or 1999/45/EC

Symbol(s)	Xn - Harmful N - Dangerous for the environment
R-code(s)	Repr. cat.3;R63 - Xi;R36/38 - Xn;R43 - N;R50/53

For the full text of the R phrases mentioned in this Section, see Section 16

Classification according to regulation (EC) No 1272/2008 (CLP)

Human Health

Skin sensitization	Category 1 - (H317)
Reproductive toxicity	Category 2 - (H361fd)

Environment

Acute aquatic toxicity	Acute 1 - (H400)
Chronic aquatic toxicity	Chronic 1 - (H410)

2.2 Label elements

Labelling according to EU Directives 67/548/EEC or 1999/45/EC



Symbol(s)

Xn - Harmful
N - Dangerous for the environment

R -phrase(s)

R43 - May cause sensitization by skin contact
R63 - Possible risk of harm to the unborn child
R36/38 - Irritating to eyes and skin
R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

S -phrase(s)

S35 - This material and its container must be disposed of in a safe way
S57 - Use appropriate container to avoid environmental contamination
S24/25 - Avoid contact with skin and eyes
S36/37/39 - Wear suitable protective clothing, gloves and eye/face protection

Labelling according Regulation (EC) No 1272/2008 (CLP)



signal word

WARNING

hazard statements

H317 - May cause an allergic skin reaction

H361fd - Suspected of damaging fertility. Suspected of damaging the unborn child

H410 - Very toxic to aquatic life with long lasting effects

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

P201 - Obtain special instructions before use

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

P280 - Wear protective gloves

P281 - Use personal protective equipment as required

P302 + P352 - IF ON SKIN: Wash with plenty of water and soap

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

P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention

P363 - Wash contaminated clothing before reuse

P391 - Collect spillage

P501 - Dispose of contents/ container in accordance with national regulation

EU Specific Hazard Statements

EUH208 - May produce an allergic reaction

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

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	60 - 70	Repr. Cat. 3;R63 R43 N;R50	Skin Sens. 1 (H317) Repr. 2 (H361d) Aquatic Acute 1 (H400)	no data available
Cymoxanil	261-043-0	57966-95-7	5 - 10	Xn; R22-R48/22 Xi;R43 N; R50/53 Repr.Cat.3;R62-R63	STOT RE 2 (H373) Skin Sens. 1 (H317) Repr. 2 (H361fd) Acute Tox. 4 (H302) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	no data available

For the full text of the R phrases mentioned in this Section, see Section 16

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	Show this safety data sheet to the doctor in attendance
Eye contact	Wash off with plenty of water Rinse thoroughly with plenty of water, also under the eyelids If eye irritation persists, consult a specialist
Skin contact	Wash off immediately with soap and plenty of water Remove and wash contaminated clothing before re-use If skin irritation persists, call a physician
Ingestion	Call a POISON CENTER or doctor/physician if exposed or you feel unwell
Inhalation	Move to fresh air

4.2 Most Important Symptoms and Effects, Both Acute and Delayed

No information available.

4.3 Indication of immediate medical attention and special treatment needed

Treat symptomatically.

5. Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media	Use water spray or fog; do not use straight streams Use water only in case of important fire.
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 giving flammable and toxic products. Carbon disulphide Hydrogen sulphide Hydrogen cyanide (hydrocyanic acid) Oxides of Nitrogen (NOx) Nitrogen oxides (NOx) Carbon oxides
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5.3 Advice for Firefighters

Use personal protective equipment
Avoid runoff to waterways and sewers

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

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

6.2 Environmental Precautions

This product is water pollutant. Prevent soil contamination or the product from flowing into the drain systems.

6.3 Methods and materials 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

Provide appropriate exhaust ventilation at places where dust is formed
Avoid dust formation in confined areas
Avoid contact with skin and eyes

Hygiene Measures

Do not eat, drink or smoke when using this product

7.2 Conditions for safe storage, including any incompatibilities

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

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) No information available

Predicted No Effect Concentration (PNEC) No information available

8.2 Exposure Controls

Engineering controls Ensure adequate ventilation, especially in confined areas

Personal Protective Equipment

Eye protection	Safety glasses with side-shields.
Skin protection	Lightweight protective clothing. Boots. Apron.
Hand protection	Protective gloves.
Respiratory protection	Effective dust mask When workers are facing concentrations above the exposure limit they must use appropriate certified respirators

Environmental exposure controls Local authorities should be advised if significant spillages cannot be contained. Do not allow material to contaminate ground water system. Prevent product from entering drains.

9. Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

appearance	Olive to brown-yellow
Physical state	solid Free flowing granules
Odor	Woody

<u>Property</u>	<u>VALUES</u>	<u>Remarks/ Method</u>
pH	approx 6.5	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
Bulk density	0.7 kg/l	Tap density / Pour density 0.68kg/l / 0.72 kg
Water solubility	dispersible	
Solubility in Other Solvents	Practically insoluble	
Partition coefficient: n-octanol/water	No information available	
Autoignition temperature	165 °C	CE A.16
decomposition temperature	No information available	
viscosity	No information available	
Oxidizing properties	Non oxidizing (according to A17 test)	
Explosive properties	According to the chemical structure no explosion reaction is expected.	

9.2 OTHER INFORMATION

VOC Content Not applicable

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
Do not expose to extreme temperatures.

10.5 Incompatible Materials

Alkaline
Strong acids
Strong oxidizing agents
Quaternary ammonium salts
Sequestering agents

10.6 Hazardous Decomposition Products

Hydrogen cyanide
Nitrogen oxides (NO_x)
Carbon oxides
Hydrogen sulfide
Oxides of sulfur
Carbon disulfide
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:

.
Irritating to eyes. (rabbit).
Irritating to skin. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons.

.
LD50 Oral > 2000 (rat) mg/kg
LD50 Dermal > 2000 (rat) mg/kg
LC50 Inhalation: > 5 mg/l

Chronic toxicity

Skin Corrosion/Irritation

May cause irritation.

Eye damage/irritation

MAY CAUSE EYE IRRITATION.

sensitization

Skin Sensitization.

Carcinogenic effects	No information available
Mutagenic effects	No information available
Reproductive effects	No information available
STOT - Single Exposure	No information available.
STOT - Repeated Exposure	No information available.

12. Ecological Information

12.1 Toxicity

EC50/72h/algae = 0.100 (mg/l)

LC50/48h/daphnia = 1.68 (mg/l)

LC50/fish/96 h = 0.41 (mg/l)

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

12.2 Persistence and Degradability

No information available

12.3 Bioaccumulative Potential

No information available

Chemical name	Log Pow
Mancozeb	1.38
Cymoxanil	log Pow = 0.59-0.67 @ 20°C

12.4 Mobility in Soil

No information available.

12.5 Results of PBT and vPvB Assessment

No information available

12.6 Other Adverse Effects

No information available.

Chemical name	EU - Endocrine Disruptors 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. Waste codes should be assigned by the user based on the application for which the product was used.

14. Transport Information

ADR/RID

14.1 UN-No	UN3077
14.2 Proper shipping name	Environmentally hazardous substance, solid, n.o.s. (Mancozeb Cymoxanil Mixture)
14.3 Hazard class	9
14.4 Packing group	III
14.5 Environmental Hazard	DANGEROUS FOR THE ENVIRONMENT
14.6 Special Provisions	274, 335, 601
Tunnel restriction code	(E)

IMDG/IMO

14.1 UN-No	UN3077
14.2 Proper shipping name	Environmentally hazardous substance, solid, n.o.s. (mancozeb , Cymoxanil , Mixture)
14.3 Hazard class	9
14.4 Packing group	III
14.5 Environmental Hazard	Marine Pollutant
14.6 Special Provisions	274, 335

IATA/ICAO

14.1 UN-No	UN3077
14.2 Proper shipping name	Environmentally hazardous substance, solid, n.o.s. (mancozeb , Cymoxanil , Mixture)
14.3 Hazard class	9
14.4 Packing group	III
14.5 Environmental Hazard	DANGEROUS FOR THE ENVIRONMENT
14.6 Special Provisions	A158, A179, A97

15. Regulatory Information

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

Registration n° MAPP 16653

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

International Inventories

TSCA	Complies
EINECS/ ELINCS	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**

R22 - Harmful if swallowed
R43 - May cause sensitization by skin contact
R50 - Very toxic to aquatic organisms
R62 - Possible risk of impaired fertility
R63 - Possible risk of harm to the unborn child

R48/22 - Also harmful: danger of serious damage to health by prolonged exposure if swallowed
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

H302 - Harmful if swallowed
H317 - May cause an allergic skin reaction
H361d - Suspected of damaging the unborn child
H361fd - Suspected of damaging fertility. Suspected of damaging the unborn child
H373 - May cause damage to organs through prolonged or repeated exposure
H400 - Very toxic to aquatic life
H410 - Very toxic to aquatic life with long lasting effects
H411 - Toxic to aquatic life with long lasting effects

Revision date 12-Dec-2014

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 responsibility 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