

Safety Data Sheet

ETHOFOL 500 SC

Preparation Date 07-May-2012 Revision date 11-Dec-2014 Revision Number: 2

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

1.1 Identification of the product

Product code HBX01

Product Description: ETHOFOL 500 SC

Synonyms Ethofumesate 500 g/L SC

Pure substance/preparation Preparation

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

Recommended use Herbicide

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) Xi - Irritant

N - Dangerous for the environment

R-code(s) Xi;R43 N;R51/53

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

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

Skin sensitization Category 1 - H317

Chronic aquatic toxicity Chronic 2 - H411

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

2.2 Label elements

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



Symbol(s)

Xi - Irritant

N - Dangerous for the environment

R -phrase(s)

R43 - May cause sensitization by skin contact

R51/53 - Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

S -phrase(s)

S 2 - Keep out of the reach of children

S13 - Keep away from food, drink and animal feedingstuffs

S24 - Avoid contact with skin

S37 - Wear suitable gloves

S46 - If swallowed, seek medical advice immediately and show this container or label

S57 - Use appropriate container to avoid environmental contamination

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



signal word WARNING

hazard statements

H317 - May cause an allergic skin reaction

H411 - Toxic to aquatic life with long lasting effects

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

P273 - Avoid release to the environment

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray

P280 - Wear protective gloves/protective clothing/eye protection/face protection

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

P391 - Collect spillage

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

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

P363 - Wash contaminated clothing before reuse

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. |
|--|-----------|------------|----------|--|--|-------------------|
| Ethofumesate | 247-525-3 | 26225-79-6 | 40 - 50 | N; R51-53 | Aquatic Chronic 2 (H411) | no data available |
| Ethoxylated fatty alcohol | - | - (ND) | 1 - 5 | Xn; R22 Xi; R41 | - | no data available |
| Ethylene glycol | 203-473-3 | 107-21-1 | 5 - 10 | Xn;R22 | Acute Tox. 4 (H302) | no data available |
| Aqueous dipropylene glycol solution of approx. 20% 1,2-benzisothiazolin-3-o ne (2634-33-5 (17-23% + 1310-73-2 (5-15%)) | - | - | <1 | C; R34 Xn; R22 Xi; R43 N; R50 | Skin Corr. 1B (H314) Skin Sens. 1 (H317) Acute Tox. 4 (H302) Aquatic Acute 1 (H400) | - |

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 In case of accident or if you feel unwell, seek medical advice immediately (show the label

where possible)

Eye contact In case of eye contact, remove contact lens and rinse immediately with plenty of water, also

under the eyelids, for at least 15 minutes If eye irritation persists, consult a specialist

Skin contactWash off immediately with soap and plenty of water removing all contaminated clothes and

shoes

Ingestion Do NOT induce vomiting

Do not induce vomiting unless told to do so by a poison control center or doctor Call a POISON CENTER or doctor/physician if exposed or you feel unwell

Inhalation Move to fresh air

Call a POISON CENTER or doctor/physician if you feel unwell

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 Water spray

Unsuitable extinguishing mediaDo 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 Burning produces obnoxious and toxic fumes

5.3 Advice for Firefighters

Wear self-contained breathing apparatus and protective suit

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Evacuate personnel to safe areas Avoid contact with the skin and the eyes

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 materials for containment and cleaning up

Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container

7. Handling and Storage

7.1 Precautions for Safe Handling

Handling

Provide adequate ventilation Ensure that eyewash stations and safety showers are close to the workstation location

Hygiene Measures

Avoid contact with skin and eyes Wash hands after handling Do not eat, drink or smoke when using this product

7.2 Conditions for safe storage, including any incompatibilities

Keep out of the reach of children Keep only in the original container/package in a cool well-ventilated place

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 |
|-------------------|-----------------------------|----------------------------------|-----------------------------|-----------------------------|------------------------------|
| Ethylene glycol | S* | STEL: 40 ppm | TWA: 20 ppm TWA: | S* | MAK: 10 ppm MAK: |
| | TWA 20 ppm TWA | STEL: 104 mg/m ³ | 52 mg/m ³ | STEL: 40 ppm | 26 mg/m ³ |
| | 52 mg/m ³ | STEL: 30 mg/m ³ | STEL: 40 ppm | STEL: 104 mg/m ³ | Ceiling / Peak: 20 |
| | STEL 40 ppm STEL | TWA: 20 ppm TWA: | STEL: 104 mg/m ³ | TWA: 20 ppm TWA: | ppm Ceiling / Peak: |
| | 104 mg/m ³ | 52 mg/m ³ TWA: 10 | - | 52 mg/m ³ | 52 mg/m ³ |
| | | mg/m³ | | | Skin |
| | | Skin | | | TWA: 10 ppm TWA: |
| | | | | | 26 mg/m ³ |
| Component | Italy | Portugal | Netherlands | Finland | Denmark |
| Ethylene glycol | TWA: 20 ppm TWA | : Ceiling: 100 mg/m ³ | Skin | TWA: 20 ppm TWA: | TWA: 10 ppm TWA: |
| 107-21-1 (5 - 10) | 52 mg/m ³ | | STEL: 104 mg/m ³ | 50 mg/m ³ | 26 mg/m ³ TWA: 10 |
| | STEL: 40 ppm | | TWA: 52 mg/m ³ | STEL: 40 ppm | mg/m³ |
| | STEL: 104 mg/m ³ | | TWA: 10 mg/m ³ | STEL: 100 mg/m ³ | Skin |
| | Skin | | | Skin | |
| Chemical name | Austria | Switzerland | Poland | Norway | Ireland |
| Ethylene glycol | Skin | Skin | STEL: 50 mg/m ³ | TWA: 10 mg/m ³ | TWA: 10 mg/m ³ |
| | STEL 20 ppm STEL | STEL: 20 ppm | TWA: 15 mg/m ³ | TWA: 20 ppm TWA: | TWA: 20 ppm TWA: |
| | 52 mg/m ³ | STEL: 52 mg/m ³ | | 52 mg/m ³ | 52 mg/m ³ |
| | TWA: 10 ppm TWA: | TWA: 10 ppm TWA: | | Skin | STEL: 40 ppm |
| | 26 mg/m ³ | 26 mg/m ³ | | Ceiling: 25 ppm | STEL: 104 mg/m ³ |
| | | | | STEL: 104 mg/m ³ | Skin |
| | | | | STEL: 40 ppm | |

Derived No Effect Level (DNEL) No information available

Predicted No Effect Concentration No

on No information available

(PNEC)

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 Hand protectionLong sleeved clothing.
Protective gloves.

Respiratory protection 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 white Physical state liquid

suspension concentrate

Odor characteristic

 Property
 VALUES
 Remarks/ Method

 pH
 7.49
 (1% aq) - CIPAC MT 75

Melting point/freezing pointNo information available

Boiling Point/Range No information available

flash point Not Applicable EEC A.9

flammability (solid, gas) Not Applicable

Specific gravity 1.131 g/mL CIPAC MT 3.3.2

Solubility in Other Solvents No information available

Partition coefficient: n-octanol/waterNo information available

Autoignition temperature 384 °C EEC A.15

decomposition temperature No information available

viscosity 295 cPs @ 20°C OECD 114

Oxidizing properties Non oxidizing

Explosive properties According to the chemical structure no explosion reaction is expected.

9.2 OTHER INFORMATION

VOC Content No information available

10. Stability and Reactivity

10.1 Reactivity

No information available.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

No information available.

10.4 Conditions to avoid

Keep away from open flames, hot surfaces and sources of ignition

10.5 Incompatible Materials

Acids

Strong oxidizing agents

10.6 Hazardous Decomposition Products

Burning produces obnoxious and toxic fumes

11. Toxicological Information

11.1 Information on Toxicological Effects

Acute toxicity

Local effects

Inhalation There is no data available for this product.

Eye contact Moderately irritating to the eyes.

Skin contact No skin irritation.

Ingestion There is no data available for this product.

LD50 Oral > 2000 mg/kg (rat) **LD50 Dermal** > 4000 mg/kg (rat)

Chronic toxicity

Skin Corrosion/IrritationNo information available.

sensitization May cause sensitization by skin contact.

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 = 171 μ l/l EC50/48h/daphnia = 47 μ l/l LC50/fish/96 h = > 21 mg/L

12.2 Persistence and Degradability

No information available

12.3 Bioaccumulative Potential

No information available

| Chemical name | Log Pow |
|-----------------|---------|
| Ethylene glycol | -1.93 |

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.

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 UN3082

14.2 Proper shipping name Environmentally hazardous substance, liquid, n.o.s. ((Ethofumesate))

14.3 Hazard class914.4 Packing groupIII14.5 Environmental HazardYes

14.6 Special Provisions 274, 335, 601

Tunnel restriction code (E)

IMDG/IMO

14.1 UN-No UN3082

14.2 Proper shipping name Environmentally hazardous substance, liquid, n.o.s ((Ethofumesate))

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 UN3082

14.2 Proper shipping name Environmentally hazardous substance, liquid, n.o.s ((Ethofumesate))

14.3 Hazard class914.4 Packing groupIII14.5 Environmental HazardYes

14.6 Special Provisions A97, A158

15. Regulatory Information

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

Registration n° MAPP 15179

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

International Inventories

TSCA Complies EINECS/ Complies

ELINCS

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

R34 - Causes burns

R41 - Risk of serious damage to eyes

R43 - May cause sensitization by skin contact

R50 - Very toxic to aquatic organisms

R51/53 - 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

H411 - Toxic to aquatic life with long lasting effects

Revision date 11-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 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
