



Safety Data Sheet

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

ETHOFOL

Preparation Date 15-Jan-2020

Revision date 15-Jan-2020

Revision Number: 1

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

1.1 Identification of the product

| | |
|----------------------------|-------------------------|
| Product code | HBX04 |
| Product Description | ETHOFOL |
| Formulation | Ethofumesate 500 g/L SC |
| Synonyms | - |
| Pure substance/preparation | Preparation |

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

| | |
|------------------|--------------------------------------|
| Recommended use | Herbicide |
| 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]

Acute aquatic toxicity Category 1 - H400

Chronic Aquatic Toxicity Category 1 - H410

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

H410 - Very toxic to aquatic life with long lasting effects

Precautionary statements

P101 - If medical advice is needed, have product container or label at hand

P102 - Keep out of reach of children

P270 - Do not eat, drink or smoke when using this product

P391 - Collect spillage

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

EU Specific Hazard Statements

EUH208 - Contains (1,2-Benzisothiazolin-3-one). 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

| |
|--|
| 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] |
|--------------------------------|------------|-----------|--------------|-----------|----------|---|
| Ethofumesate | 26225-79-6 | 247-525-3 | 607-314-00-2 | - | 40 - 50 | Aquatic Chronic 2 (H411) |
| Polyethoxylated polyarylphenol | 99734-09-5 | 619-457-8 | - | - | 1 - 5 | Aquatic Chronic 3 (H412) |
| 1,2-Benzisothiazolin-3-one | 2634-33-5 | 220-120-9 | 613-088-00-6 | - | < 1 | Acute Tox. 4 (H302) Skin Irrit. 2 (H315) Eye Dam. 1 (H318) Skin Sens. 1 (H317) Aquatic Acute 1 (H400) |

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**

- No information available

4.3 Indication of Any Immediate Medical Attention and Special Treatment Needed**Note to physicians**

- Treat symptomatically

Section 5: FIRE-FIGHTING MEASURES**5.1 Extinguishing media****Suitable Extinguishing Media**

- Water spray
- Carbon dioxide (CO₂)
- Dry chemical

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**

- Runoff may pollute waterways

Hazardous combustion products

- Burning produces obnoxious and toxic fumes

5.3 Advice for Firefighters

- In the event of fire and/or explosion do not breathe fumes
- Wear self-contained breathing apparatus and protective suit

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

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

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 adequate ventilation
- Use only outdoors or in a well-ventilated area
- 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

- 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

- Herbicide
- 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

- Contains no substances with occupational exposure limit values

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
- Wear protective nitrile rubber gloves
- Rate of permeability : > 480 min
- Glove thickness : > 0,4 mm

Skin and body protection

- Wear standard coveralls and Category 3 Type 4 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

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 | White to light yellow | |
| Physical state | Liquid suspension concentrate (SC) | |
| Odor | characteristic | |
| <u>Property</u> | <u>VALUES</u> | <u>Remarks/ Method</u> |
| pH | 7.5 | (1% aq) - CIPAC MT 75.3 |
| Melting point/freezing point | No information available | |
| Boiling Point/Range | No information available | |
| Flash Point | 116 °C | EC A.9 |
| Flammability (solid, gas) | Not flammable | EC A.9 |
| Relative Density | 1,119 | EC A.3 |
| Water solubility | Miscible with water | |
| Solubility in Other Solvents | No information available | |
| Partition coefficient: n-octanol/water | Not applicable | |
| Autoignition temperature | 470 °C | EC A.15 |
| Decomposition temperature | No information available | |
| Viscosity | 38 (800 s-1) - 243 (20 s-1) mPas | 40 °C, OECD 114, CIPAC MT 192 |
| Oxidizing properties | Non oxidizing EC A.21 | |
| 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

- No information available

10.2 Chemical stability

- Stable under normal conditions

10.3 Possibility of hazardous reactions

- None under normal processing

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

Section 11: TOXICOLOGICAL INFORMATION**11.1 Information on Toxicological Effects****Acute toxicity****Components Information**

| Chemical name | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|---------------|--------------------|----------------------|-------------------------------------|
| Ethofumesate | > 2000 mg/kg (rat) | > 2000 mg/kg (Rat) | > 0.16 mg/L (Rat) 4 h, whole body |

Skin corrosion/irritation

- No skin irritation
- (rabbit)
- OECD 404

Serious eye damage/eye irritation

- No eye irritation
- (rabbit)
- OECD 405

Respiratory or skin sensitization

- skin: • Did not cause sensitization
- (Mouse)
- OECD 429

Germ cell mutagenicity

- **Ethofumesate** : Did not show mutagenic effects in animal experiments

Carcinogenicity

- **Ethofumesate** : Did not show carcinogenic effects in animal experiments

Reproductive toxicity

- **Ethofumesate** : Not classified

Teratogenic Effects

- **Ethofumesate** : Did not show teratogenic effects in animal experiments

Specific target organ toxicity (single exposure)

- No information available

Specific target organ toxicity (repeated exposure)

- No information available

Aspiration hazard

- No information available

Section 12: ECOLOGICAL INFORMATION**12.1 Toxicity**

EC50/72h/algae = 28.23 mg/L (Raphidoecelis subcapitata) - OECD 201

EC50/48h/daphnia = 38.27 mg/L (Daphnia magna) - OECD 202

LC50/fish/96 h = 38.50 mg/L (Oncorhynchus mykiss) - OECD 203

12.2 Persistence and Degradability

- No information available

12.3 Bioaccumulative Potential

| Chemical name | Log Pow |
|----------------------------|---------|
| Ethofumesate | 2.7 |
| 1,2-Benzisothiazolin-3-one | 1.3 |

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

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 : UN3082

14.2 UN proper shipping name

- ADR : Environmentally hazardous substance, liquid, n.o.s. (Ethofumesate)
- IMDG : Environmentally hazardous substance, liquid, n.o.s (Ethofumesate)
- IATA : Environmentally hazardous substance, liquid, n.o.s (Ethofumesate)

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, 969
- IATA : A97, A158, 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 19338

- 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**

- H302 - Harmful if swallowed
- H315 - Causes skin irritation
- H317 - May cause an allergic skin reaction
- H318 - Causes serious eye damage
- 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
- H412 - Harmful to aquatic life with long lasting effects

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

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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 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