# Chemical Safety Data Sheet MSDS / SDS

#### **Ethofumesate SDS**

Revision Date: 2024-04-25 Revision Number: 1

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# SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### Product identifier

Product name: Ethofumesate CAS: 26225-79-6

### Relevant identified uses of the substance or mixture and uses advised against

Relevant identified For R&D use only. Not for medicinal, household or other use.

uses:

Uses advised none

against:

## Company Identification

Company: Chemicalbook.in

Address: 5 vasavi Layout Basaveswara Nilayam Pragathi Nagar Hyderabad, India -500090

Telephone: +91 9550333722

# **SECTION 2: Hazards identification**

#### Classification of the substance or mixture

Hazardous to the aquatic environment, long-term (Chronic) - Category Chronic 2

## GHS label elements, including precautionary statements

Pictogram(s)

**\$** 

Signal word No signal word

Hazard statement(s)

H411 Toxic to aquatic life with long lasting effects

Precautionary statement(s)

Prevention

P273 Avoid release to the environment.

Response

P391 Collect spillage.

Storage

none

Disposal

P501 Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Other hazards which do not result in classification

no data available

# **SECTION 3: Composition/information on ingredients**

Substance

Chemical name: Ethofumesate

Common names and Ethofumesate

synonyms:

CAS number: 26225-79-6

EC number: 247-525-3

Concentration: 100%

#### **SECTION 4: First aid measures**

### Description of necessary first-aid measures

#### If inhaled

Move the victim into fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration and consult a doctor immediately. Do not use mouth to mouth resuscitation if the victim ingested or inhaled the chemical.

### Following skin contact

Take off contaminated clothing immediately. Wash off with soap and plenty of water. Consult a doctor.

### Following eye contact

Rinse with pure water for at least 15 minutes. Consult a doctor.

### Following ingestion

Rinse mouth with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Call a doctor or Poison Control Center immediately.

## Most important symptoms/effects, acute and delayed

no data available

### Indication of immediate medical attention and special treatment needed, if necessary

Basic treatment: Establish a patent airway (oropharyngeal or nasopharyngeal airway, if needed). Suction if necessary. Watch for signs of respiratory insufficiency and assist ventilations if needed. Administer oxygen by nonrebreather mask at 10 to 15 L/min. Monitor for pulmonary edema and treat if necessary . Monitor for shock and treat if necessary . Anticipate seizures and treat if necessary . For eye contamination, flush eyes immediately with water. Irrigate each eye continuously with 0.9% saline (NS) during transport . Do not use emetics. For ingestion, rinse mouth and administer 5 ml/kg up to 200 ml of water for dilution if the patient can swallow, has a strong gag reflex, and does not drool . Cover skin burns with dry sterile dressings after decontamination . Poisons A and B

# **SECTION 5: Firefighting measures**

### Suitable extinguishing media

Use dry chemical, carbon dioxide or alcohol-resistant foam.

## Specific hazards arising from the chemical

no data available

## Special protective actions for fire-fighters

Wear self-contained breathing apparatus for firefighting if necessary.

### **SECTION 6:** Accidental release measures

### Personal precautions, protective equipment and emergency procedures

Avoid dust formation. Avoid breathing mist, gas or vapours. Avoid contacting with skin and eye. Use personal protective equipment. Wear chemical impermeable gloves. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

### **Environmental precautions**

Prevent further spillage or leakage if it is safe to do so. Do not let the chemical enter drains. Discharge into the environment must be avoided.

### Methods and materials for containment and cleaning up

If a spill occurs, clean it up promptly. Don't wash it away. Instead, sprinkle the spill with sawdust, vermiculite, or kitty litter. Sweep it into a plastic garbage bag, and dispose of it as directed on the pesticide product label.

# **SECTION 7: Handling and storage**

### Precautions for safe handling

Handling in a well ventilated place. Wear suitable protective clothing. Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Use non-sparking tools. Prevent fire caused by electrostatic discharge steam.

## Conditions for safe storage, including any incompatibilities

Do not store near food feed or fertilizer. Flowable formulation non-combustible can be stored down to 15 deg F.

# SECTION 8: Exposure controls/personal protection

### Control parameters

### Occupational Exposure limit values

no data available

### Biological limit values

no data available

### Appropriate engineering controls

Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Set up emergency exits and the risk-elimination area.

## Individual protection measures, such as personal protective equipment (PPE)

# Eye/face protection

Wear tightly fitting safety goggles with side-shields conforming to EN 166(EU) or NIOSH (US).

# Skin protection

Wear fire/flame resistant and impervious clothing. Handle with gloves. Gloves must be inspected prior to use. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

### Respiratory protection

If the exposure limits are exceeded, irritation or other symptoms are experienced, use a full-face respirator.

#### Thermal hazards

no data available

# SECTION 9: Physical and chemical properties and safety characteristics

Physical state: Colorless solid

**Colour:** White crystaline solid

Odour: Mild, aromatic odor

Melting point/freezing

point:

100°C

Boiling point or initial boiling point and boiling range:

409.1°C at 760mmHg

Flammability: no data available

Lower and upper no data available

explosion

limit/flammability

limit:

TO data available

Flash point: 201.2°C

Auto-ignition temperature:

no data available

Decomposition

no data available

temperature:

pH: no data available
Kinematic no data available

viscosity:

Solubility: >600 mg/L in acetone, dichloromethane, dimethyl sulfoxide, ethyl acetate; 300-600 g/L in

toluene and p-xylene; 120-150 g/L in methanol; 60-76 g/L in ethanol; 25-30 g/L in

isopropanol; 4.67 g/L in hexane

Partition log Kow = 2.7

coefficient noctanol/water:

Vapour pressure: 1.58E-06mmHg at 25°C

Density and/or relative density:

1.27g/cm3

Relative vapour

no data available

density:

Particle characteristics:

no data available

# **SECTION 10: Stability and reactivity**

# Reactivity

no data available

## Chemical stability

Relatively stable in water.

# Possibility of hazardous reactions

no data available

#### Conditions to avoid

no data available

# Incompatible materials

no data available

# Hazardous decomposition products

no data available

# **SECTION 11: Toxicological information**

# Acute toxicity

Oral: LD50 Rat oral 1130 mg/kg

Inhalation: LC50 Rat inhalation >3.97 mg/L air/4 hr

Dermal: LD50 Rat percutaneous >2000 mg/kg

## Skin corrosion/irritation

no data available

# Serious eye damage/irritation

no data available

# Respiratory or skin sensitization

no data available

# Germ cell mutagenicity

no data available

# Carcinogenicity

no data available

# Reproductive toxicity

no data available

# STOT-single exposure

no data available

# STOT-repeated exposure

no data available

# Aspiration hazard

no data available

# SECTION 12: Ecological information

**Toxicity** 

Toxicity to fish: LC50 Lepomis macrochirus (Bluegill sunfish, weight 1.5 g) 2.5 ppm/96 hr (95% confidence limit: 1.0-5.0 ppm); static /technical product

Toxicity to daphnia and other aquatic invertebrates: EC50 Daphnia magna (Water flea, age <24 hr; intoxication immobilization) 64 ppm/48 hr (95% confidence limit: 48-83 ppm); static /95% Al formulated product

Toxicity to algae: no data available

Toxicity to microorganisms: no data available

## Persistence and degradability

AEROBIC: The microbial dissipation half-life of ethofumesate in soils under aerobic conditions was reported to range from 83 to 253 days(1). The 50% dissipation time (DT50) of ethofumesate in a sediment/water microcosm was reported as 125 days(2). The half-life of ethofumesate in soil at 22 to 25 deg C was reported as 45 days(3).

# Bioaccumulative potential

An estimated BCF of 24 was calculated for ethofumesate(SRC), using a log Kow of 2.7(1) and a regression-derived equation(2). According to a classification scheme(3), this BCF suggests the potential for bioconcentration in aquatic organisms is low(SRC).

### Mobility in soil

The Koc value of ethofumesate measured in 10 different soils ranged from 55 to 500, with a mean value of 213(1). According to a classification scheme(2), these Koc values suggest that ethofumesate is expected to have high to moderate mobility in soil(SRC).

#### Other adverse effects

no data available

## **SECTION 13: Disposal considerations**

# Disposal methods

#### Product

The material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems.

### Contaminated packaging

Containers can be triply rinsed (or equivalent) and offered for recycling or reconditioning. Alternatively, the packaging can be

punctured to make it unusable for other purposes and then be disposed of in a sanitary landfill. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.

# **SECTION 14: Transport information**

#### **UN Number**

ADR/RID: Not dangerous goods. (For reference only, please check.) IMDG: Not dangerous goods. (For reference only, please check.) IATA: Not dangerous goods. (For reference only, please check.)

## **UN Proper Shipping Name**

ADR/RID: Not dangerous goods. (For reference only, please check.) IMDG: Not dangerous goods. (For reference only, please check.) IATA: Not dangerous goods. (For reference only, please check.)

# Transport hazard class(es)

ADR/RID: Not dangerous goods. (For reference only, please check.) IMDG: Not dangerous goods. (For reference only, please check.) IATA: Not dangerous goods. (For reference only, please check.)

# Packing group, if applicable

ADR/RID: Not dangerous goods. (For reference only, please check.) IMDG: Not dangerous goods. (For reference only, please check.) IATA: Not dangerous goods. (For reference only, please check.)

#### **Environmental hazards**

ADR/RID: Yes IMDG: Yes IATA: Yes

# Special precautions for user

no data available

## Transport in bulk according to IMO instruments

no data available

# **SECTION 15: Regulatory information**

Safety, health and environmental regulations specific for the product in question

European Inventory of Existing Commercial Chemical Substances (EINECS)

Listed.

**EC Inventory** 

Listed.

United States Toxic Substances Control Act (TSCA) Inventory

Not Listed.

China Catalog of Hazardous chemicals 2015

Not Listed.

New Zealand Inventory of Chemicals (NZIoC)

Listed.

(PICCS)

Not Listed.

Vietnam National Chemical Inventory

Listed.

IECSC)

Not Listed.

Korea Existing Chemicals List (KECL)

Not Listed.

#### **SECTION 16: Other information**

#### Abbreviations and acronyms

CAS: Chemical Abstracts Service

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

RID: Regulation concerning the International Carriage of Dangerous Goods by Rail

IMDG: International Maritime Dangerous Goods

IATA: International Air Transportation Association

TWA: Time Weighted Average

STEL: Short term exposure limit

LC50: Lethal Concentration 50%

LD50: Lethal Dose 50%

EC50: Effective Concentration 50%

#### References

IPCS - The International Chemical Safety Cards (ICSC), website: http://www.ilo.org/dyn/icsc/showcard.home

HSDB - Hazardous Substances Data Bank, website: https://toxnet.nlm.nih.gov/newtoxnet/hsdb.htm

IARC - International Agency for Research on Cancer, website: http://www.iarc.fr/

eChemPortal - The Global Portal to Information on Chemical Substances by OECD, website:

http://www.echemportal.org/echemportal/index?pageID=0&request\_locale=en

CAMEO Chemicals, website: http://cameochemicals.noaa.gov/search/simple

ChemIDplus, website: http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp

ERG - Emergency Response Guidebook by U.S. Department of Transportation, website:

http://www.phmsa.dot.gov/hazmat/library/erg

Germany GESTIS-database on hazard substance, website: http://www.dguv.de/ifa/gestis-stoffdatenbank/index-2.jsp

ECHA - European Chemicals Agency, website: https://echa.europa.eu/

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