

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product name : Ethoxycarbonyl isothiocyanate

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

According to Regulation (EC) No1272/2008

Flammable liquids (Category 3)

Acute toxicity, Inhalation (Category 3)

Skin irritation (Category 2)

Eye irritation (Category 2)

Respiratory sensitization (Category 1)

Skin sensitization (Category 1)

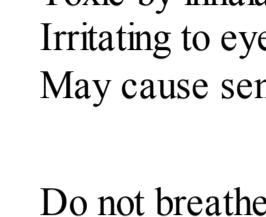
Specific target organ toxicity - single exposure (Category 3)

According to European Directive 67/548/EEC as amended.

Toxic by inhalation. Irritating to eyes, respiratory system and skin. May cause sensitization by inhalation.

Label elements

Pictogram



Signal word

Danger

Hazard statement(s)

H226

Flammable liquid and vapour.

H315

Causes skin irritation.

H317

May cause an allergic skin reaction.

H319

Causes serious eye irritation.

H331

Toxic if inhaled.

H334

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H335

May cause respiratory irritation.

Precautionary statement(s)

P261

Avoid breathing dust/fume/gas/mist/vapours/spray.

P280

Wear protective gloves.

P305 + P351 + P338

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P311

Call a POISON CENTER or doctor/physician.

Hazard symbol(s)

T

Toxic

R-phrase(s)

R23

Toxic by inhalation.

R36/37/38

Irritating to eyes, respiratory system and skin.

R42

May cause sensitization by inhalation.

S-phrase(s)

S23

Do not breathe vapour.

S26

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S36/37/39

Wear suitable protective clothing, gloves and eye/face protection.

S45

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

Other hazards

Lachrymator.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms : Ethyl isothiocyanatoformate

Formula : C4H5NO2S

Molecular Weight : 131,15 g/mol

CAS-No.	EC-No.	Classification	Concentration
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Ethyl isothiocyanatoformate

16182-04-0 240-318-9 -

Flam. Liq. 3; Acute Tox. 3;

Skin Irrit. 2; Eye Irrit. 2; Resp.

Sens. 1; Skin Sens. 1; STOT

SE 3; H226, H315, H317,

H319, H331, H334, H335

T, R23 - R36/37/38 - R42

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

4. FIRST AID MEASURES

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled

If breathed in, move person into fresh air. If not breathing give artificial respiration Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

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

Special protective equipment for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Methods and materials for containment and cleaning up

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.

Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.

Conditions for safe storage

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Recommended storage temperature: 2 - 8 °C

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Personal protective equipment

Respiratory protection

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Handle with gloves.

Eye protection

Face shield and safety glasses

Skin and body protection

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene measures

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form : clear, liquid

Safety data

pH : no data available

Melting point : no data available

Boiling point : 56 °C at 24 hPa - lit.

Flash point : 50 °C - closed cup

Ignition temperature : no data available

Lower explosion limit : no data available

Upper explosion limit : no data available

Density : 1,112 g/cm3 at 25 °C

Water solubility : no data available

10. STABILITY AND REACTIVITY

Chemical stability

Stable under recommended storage conditions.

Conditions to avoid

Heat. Avoid moisture.

Materials to avoid

Water, Alcohols, Strong bases, Amines, acids, Strong oxidizing agents

Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, nitrogen oxides (NOx), Sulphur oxides

11. TOXICOLOGICAL INFORMATION

Acute toxicity

no data available

Inhalation: no data available

Skin corrosion/irritation

no data available

Eye damage/eye irritation

no data available

Respiratory or skin sensitization

no data available

May cause allergic respiratory and skin reactions

Germs cell mutagenicity

no data available

Carcinogenicity

no data available

Reproductive toxicity

no data available

Specific target organ toxicity - single exposure

no data available

Specific target organ toxicity - repeated exposure

no data available

Aspiration hazard

no data available

Potential health effects

Inhalation : Toxic if inhaled. Causes respiratory tract irritation.

Ingestion : May be harmful if swallowed. Causes respiratory tract irritation.

Skin : May be harmful if absorbed through skin. Causes skin irritation.

Eyes : Causes eye irritation.

Signs and symptoms of Exposure

Repeated exposure. May cause asthma, chronic bronchitis, or other respiratory diseases. May cause allergic reactions.

May cause eye irritation and temporary loss of vision.

May cause skin irritation and allergic skin reactions.

May cause respiratory tract irritation.

May cause allergic respiratory reactions.

May cause allergic reactions.

May cause