

Revision Date 24-Nov-2010

Revision Number 1

## 1. PRODUCT AND COMPANY IDENTIFICATION

### Product Identifier

Product Description:

Ethyl isothiocyanate

Cat No.

376860000; 376860050; 376860250

Synonyms

Ethyl Mustard Oil; Isothiocyanatoethane.

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

Recommended Use

Laboratory chemicals

Uses advised against

No Information available

### Details of the supplier of the safety data sheet

#### Company

Acros Organics BVBA  
Janssen Pharmaceuticaaan 3a  
2440 Geel, Belgium

#### E-mail address

begel.sdsdesk@thermofisher.com

#### Emergency Telephone Number

For information in the US, call: 800-ACROS-01

For information in Europe, call: +32 14 57 52 11

Emergency Number, Europe: +32 14 57 52 99

Emergency Number, US: 201-796-7100

CHEMTREC Phone Number, US: 800-424-9300

CHEMTREC Phone Number, Europe: 703-527-3887

## 2. HAZARDS IDENTIFICATION

### Classification of the substance or mixture

#### REGULATION (EC) No 1272/2008

Acute oral toxicity	Category 3
Acute dermal toxicity	Category 3
Acute Inhalation Toxicity - Dusts and Mists	Category 3
Skin Corrosion / irritation	Category 1
Serious Eye Damage/Eye Irritation	Category 1
Flammable liquids.	Category 3 Category 2

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

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

#### Symbol(s)

T - Toxic

#### R -phrase(s)

R10 - Flammable

R34 - Causes burns

#### Risk Combination Phrases

R23/24/25 - Toxic by inhalation, in contact with skin and if swallowed

## 2. HAZARDS IDENTIFICATION

### Label Elements



### Signal Word

**Danger**

### Hazard Statements

H301 - Toxic if swallowed  
 H314 - Causes severe skin burns and eye damage  
 H331 - Toxic if inhaled  
 H318 - Causes serious eye damage  
 H311 - Toxic in contact with skin  
 H226 - Flammable liquid and vapor  
 H225 - Highly flammable liquid and vapor

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

P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician  
 P280 - Wear protective gloves/protective clothing/eye protection/face protection  
 P312 - Call a POISON CENTER or doctor/physician if you feel unwell  
 P302 + P350 - IF ON SKIN: Gently wash with plenty of soap and water  
 P301 + P330 + P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting  
 P280 - Wear eye protection/face protection  
 P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
 P310 - Immediately call a POISON CENTER or doctor/physician  
 P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
 P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking  
 P240 - Ground/Bond container and receiving equipment

### Other Hazards

Lachrymator (substance which increases the flow of tears).

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	EC No.	Weight %	CAS-No	Classification	GHSCLAS	REACH Reg. No.
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### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Ethane, isothiocyanato- 542-85-8	EEC No. 208- 831-2	96	542-85-8	R10 T; R23/24/25 C; R34;	Skin Corr. 1B (H314) Acute Tox. 3 (H301) Acute Tox. 3 (H311) Acute Tox. 3 (H331)	-
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For the full text of the R phrases mentioned in this Section, see Section 16

### 4. FIRST AID MEASURES

#### Description of first aid measures

##### Eye Contact

Immediate medical attention is required Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes

##### Skin Contact

Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes Immediate medical attention is required

##### Ingestion

Do not induce vomiting Never give anything by mouth to an unconscious person Drink plenty of water Call a physician immediately Clean mouth with water If possible drink milk afterwards

##### Inhalation

Remove from exposure, lie down Move to fresh air If breathing is difficult, give oxygen If not breathing, give artificial respiration Immediate medical attention is required

##### Notes to Physician

Treat symptomatically

### 5. FIRE-FIGHTING MEASURES

#### Extinguishing media

##### Suitable Extinguishing Media

Carbon dioxide (CO<sub>2</sub>) Dry powder

#### Extinguishing media which must not be used for safety reasons

No information available.

#### Special hazards arising from the substance or mixture

Flammable Vapors may travel to source of ignition and flash back

#### Advice for fire-fighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

### 6. ACCIDENTAL RELEASE MEASURES

#### Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation

#### Environmental precautions

Prevent further leakage or spillage if safe to do so

**Methods and material for containment and cleaning up**

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust) Keep in suitable and closed containers for disposal Remove all sources of ignition Use spark-proof tools and explosion-proof equipment

**7. HANDLING AND STORAGE****Precautions for Safe Handling**

Do not breathe dust Do not breathe vapors or spray mist Do not get in eyes, on skin, or on clothing Use only in area provided with appropriate exhaust ventilation Use explosion-proof equipment Use only non-sparking tools

**Conditions for safe storage, including any incompatibilities**

Keep in a dry, cool and well-ventilated place Keep container tightly closed Keep away from heat and sources of ignition Flammables area

**Specific End Uses****8. EXPOSURE CONTROLS / PERSONAL PROTECTION****Control parameters****Exposure limits**

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

**Derived No Effect Level (DNEL)**

No information available.

**Predicted No Effect Concentration (PNEC)**

No information available.

**Exposure controls****Engineering Measures**

Ensure adequate ventilation, especially in confined areas Ensure that eyewash stations and safety showers are close to the workstation location

**Personal protective equipment****Eye Protection**

Goggles

**Hand Protection**

Protective gloves

**Skin and body protection**

Wear appropriate protective gloves and clothing to prevent skin exposure

**Respiratory Protection**

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced

**Hygiene Measures**

Handle in accordance with good industrial hygiene and safety practice

**Environmental exposure controls**

No information available.

**9. PHYSICAL AND CHEMICAL PROPERTIES****Physical State**

Liquid

**Appearance**

Clear

**odor**

rotten-egg like

**pH**

6.3 20°C

**Vapor Pressure**

13 hPa @ 23 °C

**Vapor Density**

3.00

**Boiling Point/Range**

130 - 132°C / 266 - 269.6°F @ 760 mmHg

**Melting Point/Range**

-6°C / 21.2°F

**Flash Point**

32°C / 89.6°F

**Water Solubility**

Insoluble

**Specific Gravity**

0.995

**Molecular Formula**

C3 H5 N S

**Molecular Weight**

87.14

## 10. STABILITY AND REACTIVITY

### Reactivity

#### Chemical Stability

Stable under normal conditions. Moisture sensitive.

### Possibility of Hazardous Reactions

#### Hazardous Polymerization

No information available.

#### Hazardous Reactions

No information available.

### Conditions to Avoid

Excess heat, Incompatible products, Exposure to moist air or water.

### Incompatible Materials

Acids, Water, Strong oxidizing agents, Strong bases, Alcohols, Amines.

### Hazardous Decomposition Products

Nitrogen oxides (NO<sub>x</sub>). Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>). Sulfur oxides. Sulfides.

## 11. TOXICOLOGICAL INFORMATION

### Information on Toxicological Effects

#### Acute Toxicity

##### Product Information

No acute toxicity information is available for this product

##### Component Information

#### Chronic Toxicity

##### Carcinogenicity

There are no known carcinogenic chemicals in this product

##### Sensitization

No information available.

##### Mutagenic Effects

No information available

##### Reproductive Effects

No information available.

##### Developmental Effects

No information available.

##### Target Organs

No information available.

##### Other Adverse Effects

The toxicological properties have not been fully investigated. See actual entry in RTECS for complete information

##### Endocrine Disruptor Information

None known

## 12. ECOLOGICAL INFORMATION

### Toxicity

#### Ecotoxicity effects

Do not flush into surface water or sanitary sewer system Do not allow material to contaminate ground water system

### Persistence and degradability

No information available

## 12. ECOLOGICAL INFORMATION

**Bioaccumulative potential**

No information available.

**Mobility in soil**

No information available.

**Results of PBT and vPvB assessment****Other adverse effects**

No information available

## 13. DISPOSAL CONSIDERATIONS

**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

## 14. TRANSPORT INFORMATION

**IMDG/IMO**

UN-No	3286
Hazard Class	3
Subsidiary Hazard Class	6.1, 8
Packing Group	II
Proper Shipping Name	FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S.

**ADR**

UN-No	3286
Hazard Class	3
Subsidiary Class	6.1, 8
Packing Group	II
Proper Shipping Name	FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S.

**IATA**

UN-No	3286
Hazard Class	3
Subsidiary Hazard Class	6.1, 8
Packing Group	II
Proper Shipping Name	FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S.*

## 15. REGULATORY INFORMATION

**Safety, health and environmental regulations/legislation specific for the substance or mixture****International Inventories**

Component	EINECS	ELINCS	NLP	TSCA	DSL	NDSL	PICCS	ENCS	CHINA	AICS	KECL
Ethane, isothiocyanato-	208-831-2	-		X	-	X	X	-	X	-	-

**Legend****TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**EINECS/ELINCS** - European Inventory Lists

**DSL/NDL** - Canadian Domestic Substances List/Non-Domestic Substances List

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

**CHINA** - China Inventory of Existing Chemical Substances

**AICS** - Inventory of Chemical Substances

**KECL** - Existing and Evaluated Chemical Substances

## **Chemical Safety Assessment**

### **16. OTHER INFORMATION**

#### **Text of R phrases mentioned in Section 2-3**

R10 - Flammable

R34 - Causes burns

R23/24/25 - Toxic by inhalation, in contact with skin and if swallowed

**Revision Date** 24-Nov-2010

**Revision Summary** Not applicable

**This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006**

#### **Disclaimer**

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text

**End of Safety Data Sheet**