

Revision Date 16-Apr-2012

Revision Number 2

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

Product Identifier

Product Description: 2-Chloroethyl ethyl sulfide

Cat No. 221970000; 221970050; 221970250

Synonyms 2-(Ethylthio) chloroethane; 2-chloroethyl ethyl thioether; 2-ethylthioethyl chloride

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 Pharmaceuticalaan 3a

2440 Geel, Belgium

E-mail address begel.sdsdesk@thermofisher.com

Emergency Telephone Number

For information in the US, call: 001-800-ACROS-01 For information in Europe, call: +32 14 57 52 11

Emergency Number, Europe: +32 14 57 52 99 Emergency Number, US: 001-201-796-7100

CHEMTREC Phone Number, US: 001-800-424-9300 CHEMTREC Phone Number, Europe: 001-703-527-3887

SECTION 2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

REGULATION (EC	110 121212000
Acute oral toxicity	

Acute oral toxicity	Category 4
Skin Corrosion/irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 2
Carcinogenicity	Category 2
Specific target organ systemic toxicity (single exposure)	Category 3
Flammable liquids.	Category 3

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

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

Symbol(s) Xn - Harmful R-phrase(s) R10 - Flammable

R22 - Harmful if swallowed

R40 - Limited evidence of a carcinogenic effect

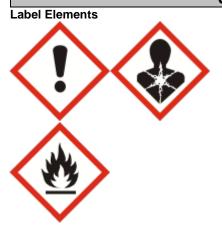
Risk Combination Phrases R36/37/38 - Irritating to eyes, respiratory system and skin



2-Chloroethyl ethyl sulfide

Revision Date 16-Apr-2012

SECTION 2. HAZARDS IDENTIFICATION



Signal Word Hazard Statements

- H315 Causes skin irritation
- H335 May cause respiratory irritation
- H319 Causes serious eye irritation
- H351 Suspected of causing cancer
- H302 Harmful if swallowed
- H226 Flammable liquid and vapor

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

- P281 Use personal protective equipment as required
- P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray
- P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell

Warning

- P302 + P352 IF ON SKIN: Wash with plenty of soap and water
- P280 Wear protective gloves/ protective clothing/ 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
- P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking

Other Hazards

No information available.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	EC-No.	Weight %	CAS-No	67/548/EEC	CLP	REACH No.
				Classification	Classification -	
					Regulation (EC)	
					No 1272/2008	



2-Chloroethyl ethyl sulfide

Revision Date 16-Apr-2012

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS									
2-Chloroethyl ethyl sulfide 693-07-2	EEC No. 211-742-1	95	693-07-2	R10 Xn; R22 Xi; R36/37/38 Carc. Cat. 3; R40;	STOT SE 3 (H335) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Carc. 2 (H351) Acute Tox. 4 (H302)	-			

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

SECTION 4. FIRST AID MEASURES

Description of first aid measures

Eye ContactRinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Obtain

medical attention.

Skin Contact Wash off immediately with soap and plenty of water while removing all contaminated clothes

and shoes. Obtain medical attention.

Ingestion Clean mouth with water. Get medical attention.

Inhalation Remove from exposure, lie down. Move to fresh air. If breathing is difficult, give oxygen. If not

breathing, give artificial respiration. Obtain medical attention.

Notes to Physician Treat symptomatically

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing media

Suitable Extinguishing Media

Water spray. Carbon dioxide (CO₂). Dry chemical. chemical foam.

Extinguishing media which must not be used for safety reasons

No information available.

Special hazards arising from the substance or mixture

Flammable.

Advice for fire-fighters

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



2-Chloroethyl ethyl sulfide

Revision Date 16-Apr-2012

SECTION 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, closed containers for disposal.. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment. Do not let this chemical enter the environment.

SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling

Avoid contact with skin and eyes. Do not breathe dust. Do not breathe vapors or spray mist. Do not ingest. Use explosion-proof equipment. Use only non-sparking tools.

Conditions for safe storage, including any incompatibilities

Keep container tightly closed. Keep away from heat and sources of ignition. Flammables area. Keep refrigerated.

Specific End Uses

SECTION 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.

This product, as supplied, does not contain any hazardous materials with biological limits **Biological limit values**

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 Use explosion-proof electrical/ventilating/lighting/equipment 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



2-Chloroethyl ethyl sulfide

Revision Date 16-Apr-2012

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.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical StateLiquidAppearanceClearodorStench

pH Vapor PressureNo information available.

44 mmHg @ 73 °C

Vapor Density 4.3

Boiling Point/Range 156 - 157°C / 312.8 - 314.6°F@ 760 mmHg

Melting Point/Range No information available.

Flash Point 52°C / 125.6°F

Autoignition Temperature No information available.

Water Solubility Insoluble
Specific Gravity 1.070
Molecular Formula C4 H9 CI S
Molecular Weight 124.63

SECTION 10. STABILITY AND REACTIVITY

Reactivity

Chemical Stability

Stable under normal conditions

Possibility of Hazardous Reactions

Hazardous PolymerizationNo information available.Hazardous Reactions .No information available.

Conditions to Avoid

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

Incompatible Materials

Strong oxidizing agents, Strong bases.

Hazardous Decomposition Products

Carbon monoxide (CO). Carbon dioxide (CO₂).



2-Chloroethyl ethyl sulfide

Revision Date 16-Apr-2012

SECTION 11. TOXICOLOGICAL INFORMATION

Information on Toxicological Effects

Acute Toxicity

Product Information No acute toxicity information is available for this product

Component Information

Component LD50 Oral LD50 Dermal LC50 Inhalation

2-Chloroethyl ethyl sulfide

252 mg/kg (Rat)

Chronic Toxicity

Carcinogenicity There are no known carcinogenic chemicals in this product

SensitizationNo information available.Mutagenic EffectsNo information availableReproductive EffectsNo information available.Developmental EffectsNo information available.Target OrgansNo 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

SECTION 12. ECOLOGICAL INFORMATION

Toxicity

Ecotoxicity effects Do not empty into drains

Persistence and degradability

No information available

Bioaccumulative potential

No information available.

Mobility in soil

No information available.

Results of PBT and vPvB assessment



2-Chloroethyl ethyl sulfide

Revision Date 16-Apr-2012

Other adverse effects

No information available

SECTION 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 to local recyclers for disposal

SECTION 14. TRANSPORT INFORMATION

IMDG/IMO

UN-No 1992 Hazard Class 3 Subsidiary Hazard Class 6.1 Packing Group III

Proper Shipping Name FLAMMABLE LIQUID, TOXIC, N.O.S.

ADR

UN-No 1992 Hazard Class 3 Subsidiary Hazard Class 6.1 Packing Group III

Proper Shipping Name FLAMMABLE LIQUID, TOXIC, N.O.S.

IATA

UN-No 1992 Hazard Class 3 Subsidiary Hazard Class 6.1 Packing Group III

Proper Shipping Name FLAMMABLE LIQUID, TOXIC, N.O.S.*

SECTION 15. REGULATORY INFORMATION

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

International Inventories



2-Chloroethyl ethyl sulfide

Revision Date 16-Apr-2012

Component	EINECS	ELINCS	NLP	TSCA	DSL	NDSL	PICCS	ENCS	CHINA	AICS	KECL
2-Chloroethyl ethyl sulfide	211-742-1	-		Χ	-	Χ	-	ı	-	-	-

Legend

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

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

DSL/NDSL - 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

SECTION 16. OTHER INFORMATION

Full text of R-phrases referred to under sections 2 and 3

R10 - Flammable

R22 - Harmful if swallowed

R40 - Limited evidence of a carcinogenic effect

R36/37/38 - Irritating to eyes, respiratory system and skin

Revision Date 16-Apr-2012

Revision Summary

Reason for revision Not applicable

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

Disclaime

The information provided on this Safety Data Sheet 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