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

Product name 2-Chloroethyl ethyl sulfide

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture According to Regulation (EC) No1272/2008

Flammable liquids (Category 3) Acute toxicity, Inhalation (Category 3) Acute toxicity, Dermal (Category 3) Acute toxicity, Oral (Category 3) Skin corrosion (Category 1B) Carcinogenicity (Category 1A)

May cause cancer. Flammable. Harmful if swallowed. Toxic by inhalation and in contact with skin. Causes

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

burns. Label elements

Pictogram

Signal word Danger

Hazard statement(s)

H226 Flammable liquid and vapour. H301 Toxic if swallowed. H311 Toxic in contact with skin. H314

Causes severe skin burns and eye damage. H331 Toxic if inhaled. H350 May cause cancer. Precautionary statement(s)

P201 Obtain special instructions before use. P261

P280

Avoid breathing dust/fume/gas/mist/vapours/spray. 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. P310 Immediately call a POISON CENTER or doctor/physician.

Hazard symbol(s) **Toxic** T

R-phrase(s) R45 May cause cancer. R22 Also harmful if swallowed. Also toxic by inhalation and in contact with skin. R23/24

R10 R34

S36/37/39

Vesicant.

Causes burns. S-phrase(s)

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

Flammable.

In case of accident or if you feel unwell, seek medical advice immediately S45 (show the label where possible). Avoid exposure - obtain special instructions before use. S53

Restricted to professional users. Other hazards

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

Classification

H331, H350

Flam. Liq. 3; Acute Tox. 3; Skin Corr. 1B; Carc. 1A; H226, H301, H311, H314,

Concentration

3. COMPOSITION/INFORMATION ON INGREDIENTS Formula C4H9ClS

124,63 g/mol

EC-No. CAS-No.

Molecular Weight

2-Chloroethyl ethyl sulphide

693-07-2 211-742-1

T, R45 - R10 - R22 - R23/24 -R34 For the full text of the H-Statements mentioned in this Section, see Section 16. 4. FIRST AID MEASURES

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

Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

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

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

Consult a physician.

In case of skin contact

General advice

If inhaled

In case of eye contact

If swallowed Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water.

5. FIRE-FIGHTING MEASURES Suitable extinguishing media

**Further information** 

For small (incipient) fires, use media such as "alcohol" foam, dry chemical, or carbon dioxide. For large fires, apply water from as far as possible. Use very large quantities (flooding) of water applied as a mist or spray; solid streams of water may be ineffective. Cool all affected containers with flooding quantities of water.

Personal precautions Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive

concentrations. Vapours can accumulate in low areas.

6. ACCIDENTAL RELEASE MEASURES

Use water spray to cool unopened containers.

Special protective equipment for fire-fighters

**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

Wear self contained breathing apparatus for fire fighting if necessary.

7. HANDLING AND STORAGE **Precautions for safe handling** 

Recommended storage temperature: 2 - 8 °C

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

13). Keep in suitable, closed containers for disposal.

Avoid exposure - obtain special instructions before use. 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** 

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully

Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section

## Personal protective equipment

**Respiratory protection** 

resealed and kept upright to prevent leakage. Store in cool place.

respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Hand protection

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with

multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air

Handle with gloves. Eye protection

standard EN 374 derived from it.

Hygiene measures

product.

Colour

Safety data

рН

Melting point

Boiling point

Density

Upper explosion limit

10. STABILITY AND REACTIVITY

11. TOXICOLOGICAL INFORMATION

Skin - rabbit - Severe skin irritation - 24 h

LD50 Oral - rat - 252 mg/kg

Skin corrosion/irritation

**Acute toxicity** 

DNA inhibition

DNA damage

Carcinogenicity

no data available

no data available

no data available

Aspiration hazard no data available

Ingestion

Skin

Eyes

Human carcinogen.

Genotoxicity in vitro - E. coli

Possible human carcinogen

Water solubility

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

Tightly fitting safety goggles. Faceshield (8-inch minimum).

9. PHYSICAL AND CHEMICAL PROPERTIES **Appearance** Form liquid

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

Flash point 52 °C - closed cup no data available Ignition temperature no data available Lower explosion limit

colourless

no data available

no data available

156 - 157 °C - lit.

no data available

no data available

1,07 g/cm3 at 25 °C

Chemical stability Stable under recommended storage conditions. Conditions to avoid Heat, flames and sparks. Materials to avoid Strong oxidizing agents Strong bases, Strong oxidizing agents Hazardous decomposition products Hazardous decomposition products formed under fire conditions. - Carbon oxides, Sulphur oxides, Hydrogen chloride gas

Serious eye damage/eye irritation Eyes - rabbit - Severe eye irritation - 24,00 h Respiratory or skin sensitization no data available Germ cell mutagenicity

Genotoxicity in vitro - Human - Other cell types

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as

Harmful if swallowed. Causes burns.

may cause:, sneezing, paroxysmal cough, loss of sense of smell, loss of taste, pharyngitis, Bronchitis.

This combustible material may be burned in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations. Contact a licensed professional

Packing group: II

Packing group: II

Packing group: II

Proper shipping name: TOXIC LIQUID, FLAMMABLE, ORGANIC, N.O.S. (2-Chloroethyl ethyl sulphide)

EMS-No: F-E, S-D

Causes eye burns.

Toxic if absorbed through skin. Causes skin burns.

Skin contact may provoke the following symptoms:, Blistering, toxic epidermal necrolysis, Inhalation of vapors

probable, possible or confirmed human carcinogen by IARC. Reproductive toxicity

Specific target organ toxicity - single exposure

Specific target organ toxicity - repeated exposure

Potential health effects Toxic if inhaled. Material is extremely destructive to the tissue of the mucous Inhalation membranes and upper respiratory tract.

Signs and Symptoms of Exposure

12. ECOLOGICAL INFORMATION **Toxicity** no data available

no data available

no data available

Mobility in soil no data available

no data available

**Product** 

Persistence and degradability

**Bioaccumulative potential** 

PBT and vPvB assessment

13. DISPOSAL CONSIDERATIONS

**Contaminated packaging** Dispose of as unused product.

Marine pollutant: No

H301 H311

H314

H331

R34

R45

**Further information** 

UN-Number: 2929 Class: 6.1 (3)

**IATA** 

**Additional Information** 

RTECS: WQ3250000

Other adverse effects no data available

waste disposal service to dispose of this material.

14. TRANSPORT INFORMATION ADR/RID UN-Number: 2929 Class: 6.1 (3) Proper shipping name: TOXIC LIQUID, FLAMMABLE, ORGANIC, N.O.S. (2-Chloroethyl ethyl sulphide) **IMDG** UN-Number: 2929 Class: 6.1 (3)

Acute toxicity Acute Tox. Carcinogenicity Carc.

Causes severe skin burns and eye damage.

WARRANTY:

Proper shipping name: Toxic liquid, flammable, organic, n.o.s. (2-Chloroethyl ethyl sulphide)

Flam. Liq. Flammable liquids H226 Flammable liquid and vapour.

Toxic if swallowed.

Toxic if inhaled.

Causes burns.

May cause cancer.

Toxic in contact with skin.

15. REGULATORY INFORMATION

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

16. OTHER INFORMATION Text of H-code(s) and R-phrase(s) mentioned in Section 3

H350 May cause cancer. Skin corrosion Skin Corr. T Toxic R10 Flammable. R22 Harmful if swallowed. R23/24 Toxic by inhalation and in contact with skin.

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