MATERIALS SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifiers

Product Name: Ethenesulfonyl chloride

CAS Number: 6608-47-5 Catalog Numbers:

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

Identified uses: For R&D use only

1.3 Details of the supplier of the safety data sheet

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Acute toxicity, oral(Category 4)

Skin corrosion/irritation (Category 1A, 1B, 1C)

Skin corrosion/irritation (Category 2)

Serious eye damage/eye irritation (Category 1)

Specific target organ toxicity, single exposure;Respiratory system(Category 3)

H335

No Resource File

2.2 GHS Label elements, including precautionary statements

Pictogram

Signal word Danger

Hazard statement(s)

H302 Harmful if swallowed

H314 Causes severe skin burns and eye damage

H315 Causes skin irritation
H318 Causes serious eye damage
H335 May cause respiratory irritation

Precautionary statement(s)

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.

P337+P313 If eye irritation persists: Get medical advice/attention.

P403+P235 Store in a well-ventilated place. Keep cool.

2.3 Other hazards.

Additional precautionary phrases are located throughout the safety data sheet.

3. COMPOSITION, INFORMATION ON INGREDIENTS

Molecular Formula: C2H3ClO2S

Molecular Weight: 126.56g/mol

Component		Concentration
Ethenesulfonyl chloride		
CAS Number	6608-47-5	-

4. FIRST AID MEASURES

4.1 Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

If inhaled

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

In case of skin contact

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

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Continue rinsing eyes during transport to hospital.

If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section

2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed

No data available

5. FIRE FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media: alcohol-resistant foam, dry chemical or carbon dioxide

Unsuitable extinguishing media: no data

5.2 Special hazards arising from the substance or mixture

In combustion toxic fumes may form.

5.3 Advice for firefighters

Wear self-contained breathing apparatus.

Wear protective clothing to prevent contact with skin and eyes.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Wear respiratory protection. Avoid dust formation. Avoid breathing vapours, mist or gas.

Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

Do not attempt to take action without suitable protective clothing.

For personal protection see section 8.

6.2 Environmental precautions

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

Alert the neighbourhood to the presence of fumes or gas.

6.3 Methods and materials for containment and cleaning up

Mix with sand or vermiculite. Sweep up and shovel. Transfer to a closable, labelled salvage container for disposal by an appropriate method.

6.4 Reference to other sections

For disposal see section 13.

7 HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Wash hands thoroughly after handling. Ensure there is sufficient ventilation of the area.

Normal measures for preventive fire protection. For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated area. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Inert atmosphere, Store in freezer, under -20°C

7.3 Specific end use(s)

The end use(s) have not been fully determined. The substance is supplied for Research and Development purposes by professionals only.

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8. EXPOSURE CONTROLS, PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product.

Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body Protection

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Do not let product enter drains.

9 PHYSICAL AND CHEMICAL PROPERTIES

Liquid **Appearance Boiling Point** No data available Melting Point No data available Odour No data available Odour Threshold No data available pН No data available No data available Flash point Evapouration rate No data available Vapour pressure No data available Vapor Density No data available Relative density No data available Solubility in water No data available Auto-ignition temperature No data available Decomposition temperature No data available Viscosity No Data No data available Explosive properties No data available Oxidizing properties No data available

10. STABILITY AND REACTIVITY

10.1 Reactivity

No data available

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

No data available

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10.4 Conditions to avoid

No data available

10.5 Incompatible materials

No data available

10.6 Hazardous decomposition products

Carbon monoxide, carbon dioxide, hydrogen chloride, oxides of sulfur.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute Toxicity No data available Skin corrosion/irritation No data available No data available Serious eye Damage/irritation No data available Respiratory or skin sensitisation No data available Germ Cell mutagenicity 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

11.2 Additional

To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.

No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH

12. ECOLOGICAL INFORMATION

12.1 Toxicity

No data available

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

No data available

12.6 Other adverse effects

No data available

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Disposal Operations

Consult state, local or national regulations for proper disposal. Hand over to authorised disposal company as hazardous waste

Disposal of Packaging

Disposal must be made according to official regulations.

14. TRANSPORT INFORMATION

DOT (US)

UN number: 3265 Class: 8 Packing group: III

Proper shipping name: Corrosive liquid, acidic, organic, n.o.s.

Environmental hazards:

IMDG

UN number: 3265 Class: 8 Packing group: III

Proper shipping name: Corrosive liquid, acidic, organic, n.o.s.

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Environmental hazards:

IATA

UN number: 3265 Class: 8 Packing group: III

Proper shipping name: Corrosive liquid, acidic, organic, n.o.s.

Environmental hazards:

15. REGULATORY INFORMATION

Safety, health and environmental and national regulations:

Product is not subject to any additional regulations or provisions

Safety Assessment

No Chemical Safety Assessment

16. OTHER INFORMATION

The reference company name of written contents

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