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**1. PRODUCT AND COMPANY IDENTIFICATION****1.1 Product identifiers**

Product name : 1-Ethyl-3-methylimidazolium ethyl sulfate

Product Number : 51682

Brand : Aldrich

CAS-No. : 342573-75-5

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

Identified uses : Laboratory chemicals, Synthesis of substances

**1.3 Details of the supplier of the safety data sheet**

Company : Sigma-Aldrich  
3050 Spruce Street  
SAINT LOUIS MO 63103  
USA

Telephone : +1 800-325-5832

Fax : +1 800-325-5052

**1.4 Emergency telephone number**

Emergency Phone # : +1-703-527-3887 (CHEMTREC)

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**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), H302  
Acute toxicity, Inhalation (Category 4), H332  
Acute toxicity, Dermal (Category 3), H311  
Skin corrosion (Category 1B), H314  
Serious eye damage (Category 1), H318  
Germ cell mutagenicity (Category 1B), H340  
Carcinogenicity (Category 1B), H350

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

**2.2 GHS Label elements, including precautionary statements**

Pictogram



Signal word

Danger

Hazard statement(s)

H302 + H332

Harmful if swallowed or if inhaled.

H311

Toxic in contact with skin.

H314

Causes severe skin burns and eye damage.

H340

May cause genetic defects.

H350

May cause cancer.

Precautionary statement(s)

P201

Obtain special instructions before use.

P202

Do not handle until all safety precautions have been read and

|                           |                                                                                                                                                                           |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| P261                      | understood.                                                                                                                                                               |
| P264                      | Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.                                                                                                                    |
| P270                      | Wash skin thoroughly after handling.                                                                                                                                      |
| P271                      | Do not eat, drink or smoke when using this product.                                                                                                                       |
| P280                      | Use only outdoors or in a well-ventilated area.                                                                                                                           |
| P301 + P312 + P330        | Wear protective gloves/ protective clothing/ eye protection/ face protection.                                                                                             |
| P301 + P330 + P331        | IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.                                                                                                             |
| P303 + P361 + P353        | Rinse mouth.                                                                                                                                                              |
| P304 + P340 + P310        | IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.                                                                                                                        |
| P305 + P351 + P338 + P310 | IF ON SKIN (or hair): Take off immediately all contaminated clothing.                                                                                                     |
| P308 + P313               | Rinse skin with water/shower.                                                                                                                                             |
| P362                      | IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.                                                       |
| P405                      | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor. |
| P501                      | IF exposed or concerned: Get medical advice/ attention.                                                                                                                   |
|                           | Take off contaminated clothing and wash before reuse.                                                                                                                     |
|                           | Store locked up.                                                                                                                                                          |
|                           | Dispose of contents/ container to an approved waste disposal plant.                                                                                                       |

### 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### 3.2 Mixtures

|                  |                                                                  |
|------------------|------------------------------------------------------------------|
| Synonyms         | : BASIONIC® LQ 01                                                |
| Formula          | : C <sub>8</sub> H <sub>16</sub> N <sub>2</sub> O <sub>4</sub> S |
| Molecular weight | : 236.29 g/mol                                                   |

#### Hazardous components

| Component                                                                                                                                           | Classification                                          | Concentration |
|-----------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|---------------|
| <b>Diethyl sulphate</b> Included in the Candidate List of Substances of Very High Concern (SVHC) according to Regulation (EC) No. 1907/2006 (REACH) |                                                         |               |
| CAS-No. 64-67-5                                                                                                                                     | Acute Tox. 4; Acute Tox. 3;                             | 90 - 100 %    |
| EC-No. 200-589-6                                                                                                                                    | Skin Corr. 1B; Eye Dam. 1;                              |               |
| Index-No. 016-027-00-6                                                                                                                              | Muta. 1B; Carc. 1B; H302 + H332, H311, H314, H340, H350 |               |

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

## 4. FIRST AID MEASURES

### 4.1 Description of first aid measures

#### General advice

Move out of dangerous area. 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

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

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**5. FIREFIGHTING MEASURES****5.1 Extinguishing media****Suitable extinguishing media**

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

**5.2 Special hazards arising from the substance or mixture**

No data available

**5.3 Advice for firefighters**

Wear self-contained breathing apparatus for firefighting if necessary.

**5.4 Further information**

No data available

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**6. ACCIDENTAL RELEASE MEASURES****6.1 Personal precautions, protective equipment and emergency procedures**

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

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.

**6.3 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.

**6.4 Reference to other sections**

For disposal see section 13.

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**7. HANDLING AND STORAGE****7.1 Precautions for safe handling**

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

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 place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

hygroscopic Store under inert gas.

Storage class (TRGS 510): 6.1D: Non-combustible, acute toxic Cat.3 / toxic hazardous materials or hazardous materials causing chronic effects

**7.3 Specific end use(s)**

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

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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.

Hazardous components without workplace control parameters

## 8.2 Exposure controls

### Appropriate engineering controls

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

### Personal protective equipment

#### Eye/face protection

Tightly fitting safety goggles. Faceshield (8-inch minimum). 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 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 respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### Control of environmental exposure

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

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

|                                                 |                                          |
|-------------------------------------------------|------------------------------------------|
| a) Appearance                                   | Form: viscous<br>Colour: light yellow    |
| b) Odour                                        | sweet                                    |
| c) Odour Threshold                              | No data available                        |
| d) pH                                           | 8.2 at 100 g/l                           |
| e) Melting point/freezing point                 | < -30 °C (< -22 °F)                      |
| f) Initial boiling point and boiling range      | No data available                        |
| g) Flash point                                  | 154.5 °C (310.1 °F) - ISO 2719           |
| h) Evaporation rate                             | No data available                        |
| i) Flammability (solid, gas)                    | No data available                        |
| j) Upper/lower flammability or explosive limits | No data available                        |
| k) Vapour pressure                              | No data available                        |
| l) Vapour density                               | No data available                        |
| m) Relative density                             | 1.239 g/cm <sup>3</sup> at 20 °C (68 °F) |
| n) Water solubility                             | completely soluble                       |
| o) Partition coefficient: n-octanol/water       | log Pow: < 0.3                           |
| p) Auto-ignition temperature                    | No data available                        |
| q) Decomposition temperature                    | 325 °C (617 °F), 270 KJ/kg -             |

- |                         |                                            |
|-------------------------|--------------------------------------------|
| r) Viscosity            | 98.7 mm <sup>2</sup> /s at 25 °C (77 °F) - |
| s) Explosive properties | No data available                          |
| t) Oxidizing properties | No data available                          |

## 9.2 Other safety information

- |                              |                          |
|------------------------------|--------------------------|
| Solubility in other solvents | Alcohol                  |
| Surface tension              | 72 mN/m at 20 °C (68 °F) |

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## 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

### 10.4 Conditions to avoid

No data available

### 10.5 Incompatible materials

Strong oxidizing agents

### 10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Nitrogen oxides (NO<sub>x</sub>), Sulphur oxides  
Other decomposition products - No data available  
In the event of fire: see section 5

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## 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

#### Acute toxicity

#### Skin corrosion/irritation

#### Serious eye damage/eye irritation

#### Respiratory or skin sensitisation

#### Germ cell mutagenicity

#### Carcinogenicity

IARC: 2A - Group 2A: Probably carcinogenic to humans (Diethyl sulphate)

NTP: RAHC - Reasonably anticipated to be a human carcinogen (Diethyl sulphate)

OSHA: No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

#### Reproductive toxicity

#### Specific target organ toxicity - single exposure

#### Specific target organ toxicity - repeated exposure

#### Aspiration hazard

#### Additional Information

RTECS: Not available

Stomach - Irregularities - Based on Human Evidence

Stomach - Irregularities - Based on Human Evidence

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## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

### 12.2 Persistence and degradability

### 12.3 Bioaccumulative potential

### 12.4 Mobility in soil

### 12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

### 12.6 Other adverse effects

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## 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

#### Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

#### Contaminated packaging

Dispose of as unused product.

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## 14. TRANSPORT INFORMATION

#### DOT (US)

Not dangerous goods

#### IMDG

Not dangerous goods

#### IATA

Not dangerous goods

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## 15. REGULATORY INFORMATION

### SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

### SARA 313 Components

The following components are subject to reporting levels established by SARA Title III, Section 313:

|                  | CAS-No. | Revision Date |
|------------------|---------|---------------|
| Diethyl sulphate | 64-67-5 | 1993-04-24    |

### SARA 311/312 Hazards

Acute Health Hazard, Chronic Health Hazard

### Massachusetts Right To Know Components

|                  | CAS-No. | Revision Date |
|------------------|---------|---------------|
| Diethyl sulphate | 64-67-5 | 1993-04-24    |

### Pennsylvania Right To Know Components

|                                           | CAS-No.     | Revision Date |
|-------------------------------------------|-------------|---------------|
| Diethyl sulphate                          | 64-67-5     | 1993-04-24    |
| 1-Ethyl-3-methyl Imidazolium ethylsulfate | 342573-75-5 |               |

|                                           | CAS-No.     | Revision Date |
|-------------------------------------------|-------------|---------------|
| Diethyl sulphate                          | 64-67-5     | 1993-04-24    |
| 1-Ethyl-3-methyl Imidazolium ethylsulfate | 342573-75-5 |               |

### New Jersey Right To Know Components

| CAS-No. | Revision Date |
|---------|---------------|
|---------|---------------|

Diethyl sulphate  
1-Ethyl-3-methyl Imidazolium ethylsulfate

64-67-5  
342573-75-5

1993-04-24

#### California Prop. 65 Components

WARNING! This product contains a chemical known to the  
State of California to cause cancer.  
Diethyl sulphate

CAS-No.  
64-67-5

Revision Date  
2007-09-28

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## 16. OTHER INFORMATION

### Full text of H-Statements referred to under sections 2 and 3.

|             |                                          |
|-------------|------------------------------------------|
| Acute Tox.  | Acute toxicity                           |
| Carc.       | Carcinogenicity                          |
| Eye Dam.    | Serious eye damage                       |
| H302        | Harmful if swallowed.                    |
| H302 + H332 | Harmful if swallowed or if inhaled.      |
| H311        | Toxic in contact with skin.              |
| H314        | Causes severe skin burns and eye damage. |
| H318        | Causes serious eye damage.               |
| H332        | Harmful if inhaled.                      |
| H340        | May cause genetic defects.               |
| H350        | May cause cancer.                        |
| Muta.       | Germ cell mutagenicity                   |
| Skin Corr.  | Skin corrosion                           |

### HMIS Rating

|                        |   |
|------------------------|---|
| Health hazard:         | 0 |
| Chronic Health Hazard: |   |
| Flammability:          | 0 |
| Physical Hazard        | 0 |

### NFPA Rating

|                    |   |
|--------------------|---|
| Health hazard:     | 0 |
| Fire Hazard:       | 0 |
| Reactivity Hazard: | 0 |
| Health hazard:     | 3 |
| Fire Hazard:       | 1 |
| Reactivity Hazard: | 0 |

### Further information

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### Preparation Information

Sigma-Aldrich Corporation  
Product Safety – Americas Region  
1-800-521-8956

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