

## SAFETY DATA SHEET

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1 Product identifiers

|              |   |
|--------------|---|
| Product name | Diethyl oxalate                           |
| CAS number   | 95-92-1                                   |
| Synonyms     | Oxalic acid, diethyl ester, ethyl oxalate |

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

|                 |                       |
|-----------------|-----------------------|
| Identified uses | Laboratory chemicals. |
|-----------------|-----------------------|

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

|         |  |
|---------|--|
| Company | Lab Alley, LLC<br>12501 Pauls Valley Road<br>Austin, Texas 78737<br>U.S.A. |
|---------|--|

|           |              |
|-----------|--------------|
| Telephone | 512-668-9918 |
| Fax       | 512-886-4008 |

#### 1.4 Emergency telephone

|                   |                              |          |
|-------------------|------------------------------|----------|
| Emergency Phone # | US & Canada: 1-800-535-5053  | INFOTRAC |
|                   | International 1-352-323-3500 | INFOTRAC |

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

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

|                                   |            |
|-----------------------------------|------------|
| Flammable liquids                 | Category 4 |
| Acute oral toxicity               | Category 4 |
| Serious Eye Damage/Eye Irritation | Category 2 |

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

Pictogram



Signal Word

Warning

Hazard statements

Combustible liquid. Harmful if swallowed. Causes serious eye irritation.

Precautionary statements:

Prevention:

Keep away from heat/sparks/open flames/hot surfaces. No smoking. Wear protective gloves/protective clothing/eye protection/face protection. Wash face, hands and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product.

Eyes:

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Ingestion:

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

Fire:

In case of fire: Use CO<sub>2</sub>, dry chemical, or foam for extinction.

Storage:

Store in a well-ventilated place. Keep cool.

Disposal:

Dispose of contents/container to an approved waste disposal plant.

### 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

None identified.

## SECTION 3: Composition/information on ingredients

### 3.1 Components

| Chemical name   | Common name and synonyms | CAS number | Concentration |
|-----------------|--------------------------|------------|---------------|
| Diethyl oxalate | ethyl oxalate            | 95-92-1    | >95%          |

## SECTION 4: First aid measures

### 4.1 Description of first-aid measures

#### General advice

If inhaled

If not breathing, give artificial respiration. Remove to fresh air. Get medical attention if symptoms occur.

In case of skin contact

Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician.

**In case of eye contact** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.

**If swallowed** Clean mouth with water and drink afterwards plenty of water.

#### 4.2 Most important symptoms and effects, both acute and delayed

Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation.

#### 4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

### SECTION 5: Firefighting measures

#### 5.1 Extinguishing media

**Suitable extinguishing media** CO<sub>2</sub>, dry chemical, dry sand, alcohol-resistant foam. Water mist may be used to cool closed containers.

**Unsuitable extinguishing media** No information available.

#### 5.2 Specific hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating gases and vapors. The product causes burns of eyes, skin and mucous membranes. Combustible materials. Containers may explode when heated. Hazardous combustion products: Carbon monoxide, Carbon dioxide.

#### 5.3 Special protective equipment and precautions for firefighters

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

#### 5.4 Further information

**Flash Point** 76 °C / 168.8 °F

**Autoignition Temperature** No information available.

##### Explosion limits

|   |                           |
|---|---------------------------|
| <b>Upper</b>                            | No data available.        |
| <b>Lower</b>                            | 0.80%                     |
| <b>Sensitivity to Mechanical Impact</b> | No information available. |
| <b>Sensitivity to Static Discharge</b>  | No information available. |

##### NFPA

|        |              |             |                  |
|--------|--------------|-------------|------------------|
| Health | Flammability | Instability | Physical hazards |
|--------|--------------|-------------|------------------|

|   |   |   |     |
|---|---|---|-----|
| 3 | 2 | 1 | N/A |
|---|---|---|-----|

## SECTION 6: Accidental release measures

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

Ensure adequate ventilation. Use personal protective equipment as required. Remove all sources of ignition. Take precautionary measures against static discharges.

### 6.2 Environmental precautions

Should not be released into the environment.

### 6.3 Methods and materials for containment and cleaning up

Keep in suitable, closed containers for disposal. Soak up with inert absorbent material. Remove all sources of ignition.

### 6.4 Reference to other sections

See section 2 for full list of hazard and precaution statements.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

#### Precautions on safe handling

Wear personal protective equipment/face protection. Do not get in eyes, on skin, or on clothing. Ensure adequate ventilation. Avoid ingestion and inhalation. Keep away from open flames, hot surfaces and sources of ignition.

#### Hygiene measures

Handle in accordance with good industrial hygiene and safety practice.

### 7.2 Conditions for safe storage, including any incompatibilities

#### Storage conditions

Keep away from heat, sparks and flame. Keep containers tightly closed in a dry, cool and well-ventilated place. Incompatible materials.

#### Incompatibilities

Acids, bases, strong oxidizing agents, reducing agent.

## SECTION 8: Exposure controls/personal protection

### 8.1 Occupational exposure limits

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

#### Biological occupational exposure limits

No information available.

## 8.2 Exposure controls

### Appropriate engineering controls

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

### Personal protective equipment

#### Eye/face protection

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face regulations in 29 CFR 1910.133 or European Standard EN166.

#### Skin and body protection

Wear appropriate protective gloves and clothing to prevent skin exposure.

#### Respiratory protection

No protective equipment is needed under normal use conditions.

#### Control of environmental exposure

No information available.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

|  |                            |
|--|----------------------------|
| Physical State                         | Liquid                     |
| Appearance                             | Colorless                  |
| Odor                                   | Aromatic                   |
| Odor Threshold                         | No information available.  |
| pH                                     | No information available.  |
| Melting Point/Range                    | -41 °C / -41.8 °F          |
| Boiling Point/Range                    | 185 °C / 365 °F @ 760 mmHg |
| Evaporation Rate                       | No information available.  |
| Flammability (solid)                   | No information available.  |
| Flammability or explosive limit        |                            |
| Upper                                  | No data available.         |
| Lower                                  | 0.80%                      |
| Vapor Pressure                         | 1.33 mbar @ 20 °C          |
| Vapor Density                          | 5.04 (Air = 1.0)           |
| Density                                | 1.070                      |
| Solubility                             | Insoluble in water.        |
| Partition coefficient; n-octanol/water | No data available.         |
| Autoignition Temp                      | No information available.  |
| Decomposition Temp                     | No information available.  |
| Viscosity                              | No information available.  |

|                      |                           |
|----------------------|---------------------------|
| Molecular Formula    | C6H10O4                   |
| Molecular Weight     | 146.14                    |
| VOC Content(%)       | No information available. |
| Oxidizing properties | No information available. |

## 9.2 Other safety information

No information available.

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

None known, based on information available.

### 10.2 Chemical stability

Moisture sensitive.

### 10.3 Possibility of hazardous reactions

No information available.

### 10.4 Conditions to avoid

Incompatible products. Exposure to moist air or water. Keep away from open flames, hot surface and sources of ignition.

### 10.5 Incompatible materials

Acids, bases, strong oxidizing agents, reducing agents.

### 10.6 Hazardous decomposition products

Carbon monoxide, carbon dioxide

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Product Information, Component Information

#### Acute toxicity

| Component       | LD50 Oral | LD50 Dermal       | LC50 Inhalation |
|-----------------|-----------|-------------------|-----------------|
| Diethyl oxalate | -         | >2000 mg/kg (rat) | -               |

#### Skin corrosion/irritation

No information available.

#### Serious eye damage/eye irritation

No information available.

#### Respiratory or skin sensitization

No information available.

**Germ cell mutagenicity**

No information available.

**Carcinogenicity**

| Component       | CAS     | IARC       | NTP        | ACGIH      | OSHA       | Mexico     |
|-----------------|---------|------------|------------|------------|------------|------------|
| Diethyl oxalate | 95-92-1 | Not listed | Not listed | Not listed | Not listed | Not listed |

**Specific target organ toxicity - single exposure**

None known.

**Specific target organ toxicity - repeated exposure**

None known.

**Reproductive toxicity**

No information available.

**Chronic effects**

No information available.

**11.2 Additional Information**

Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting: Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation

## SECTION 12: Ecological information

**12.1 Toxicity**

| Product         |      | Species             | Test Results   |
|-----------------|------|---------------------|----------------|
| Diethyl oxalate | LC50 | Poecilia reticulata | 11.5 mg/L 96 h |

**12.2 Persistence and degradability**

Based on information available, may persist.

**12.3 Bio accumulative potential**

No information available.

**12.4 Mobility in soil**

Is not likely mobile in the environment due to its low water solubility.

**12.5 Results of PBT and vPvB assessment**

No information available.

**12.6 Endocrine disrupting properties**

No information available.

## 12.7 Other adverse effects

The toxicological properties have not been fully investigated.

## SECTION 13: Disposal considerations

### 13.1 Waste Disposal Methods

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

## SECTION 14: Transport information

### DOT (US)

|                      |               |
|----------------------|---------------|
| UN-No                | UN2525        |
| Proper Shipping Name | ETHYL OXALATE |
| Hazard Class         | 6.1           |
| Packing Group        | III           |

### IMDG

|                      |               |
|----------------------|---------------|
| UN-No                | UN2525        |
| Proper Shipping Name | ETHYL OXALATE |
| Hazard Class         | 6.1           |
| Packing Group        | III           |

### IATA

|                      |               |
|----------------------|---------------|
| UN-No                | UN2525        |
| Proper Shipping Name | ETHYL OXALATE |
| Hazard Class         | 6.1           |
| Packing Group        | III           |

## SECTION 15: Regulatory information

**US federal regulations** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**  
Not listed.

**CERCLA Hazardous Substance List (40 CFR 302.4)**  
Not listed.

**SARA 304 Emergency release notification**  
Not listed.

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)**  
Not listed.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**  
**SARA 302 Extremely hazardous substance**



Not listed.

**SARA 311/312 Hazardous**

See section 2 for more information.

**SARA 313 (TRI reporting)**

Not listed.

**Other federal regulations**

**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated.

**Safe Drinking Water Act**

Not regulated

**FEMA Priority Substances Respiratory Health and Safety in the Flavor**

**Manufacturing Workplace**

Not listed

**US state regulations**

**US. Massachusetts RTK - Substance List**

Not listed

**US. New Jersey Worker and Community Right-to-Know Act**

Listed.

**US. Pennsylvania Worker and Community Right-to-Know Law**

Not listed

**California Proposition 65**

Not listed

**SECTION 16: Other information**

Issue date: 07/30/2024

Revision: 0

**SECTION 17: Disclaimer**

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.