

4/25/08

**SIGMA-ALDRICH**

**Material Safety Data Sheet**

Version 3.0  
Revision Date 07/13/2007  
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**1. PRODUCT AND COMPANY IDENTIFICATION**

Product name : **Oleic acid**  
Product Number : 364525  
Brand : Aldrich  
Company : Sigma-Aldrich  
3050 Spruce Street  
SAINT LOUIS MO 63103  
USA  
Telephone : +1 800-325-5832  
Fax : +1 800-325-5052  
Emergency Phone # : (314) 776-6555

**2. COMPOSITION/INFORMATION ON INGREDIENTS**

Formula : C18H34O2  
Molecular Weight : 282.47 g/mol

| CAS-No.    | EC-No.    | Index-No. | Concentration [%] |
|------------|-----------|-----------|-------------------|
| Oleic acid |           |           |                   |
| 112-80-1   | 204-007-1 | -         | -                 |

**3. HAZARDS IDENTIFICATION**

**Emergency Overview**  
OSHA Hazards  
Irritant

**HMIS Classification**  
Health Hazard: 2  
Flammability: 1  
Physical hazards: 0

**NFPA Rating**  
Health Hazard: 2  
Fire : 1  
Reactivity Hazard: 0

**Potential Health Effects**

**Inhalation** May be harmful if inhaled. May cause respiratory tract irritation.  
**Skin** May be harmful if absorbed through skin. May cause skin irritation.  
**Eyes** May cause eye irritation.  
**Ingestion** May be harmful if swallowed.

**4. 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**  
Wash off with soap and plenty of water. Consult a physician.  
**In case of eye contact**  
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.  
**If swallowed**  
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**5. FIRE-FIGHTING MEASURES**

**Flammable properties**  
Flash point 113 °C (235 °F) - closed cup  
Ignition temperature no data available  
**Suitable extinguishing media**  
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.  
**Special protective equipment for fire-fighters**  
Wear self contained breathing apparatus for fire fighting if necessary.

**6. ACCIDENTAL RELEASE MEASURES**

**Personal precautions**  
Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation.  
**Environmental precautions**  
Do not let product enter drains.  
**Methods for cleaning up**  
Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

**7. HANDLING AND STORAGE**

**Handling**  
Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Normal measures for preventive fire protection.  
**Storage**  
Keep container tightly closed in a dry and well-ventilated place.

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

Contains no substances with occupational exposure limit values.  
**Personal protective equipment**  
**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).  
**Hand protection**  
Handle with gloves.

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**Eye protection**

Safety glasses

**Skin and body protection**

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

**Hygiene measures**

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

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

Form liquid, clear  
Colour colourless

**Safety data**

pH no data available  
Melting point 13 °C (55 °F)  
Boiling point 220 - 222 °C (428 - 432 °F) at 9 hPa (7 mmHg)  
194 - 195 °C (381 - 383 °F) at 1.6 hPa (1.2 mmHg)  
Flash point 113 °C (235 °F) - closed cup  
Ignition temperature no data available  
Lower explosion limit no data available  
Upper explosion limit no data available  
Vapour pressure 1 hPa (1 mmHg) at 176 °C (349 °F)  
Density 0.891 g/cm<sup>3</sup>  
Water solubility no data available

**10. STABILITY AND REACTIVITY****Storage stability**

Stable under recommended storage conditions.

**Materials to avoid**

Strong oxidizing agents

**Hazardous decomposition products****Hazardous decomposition products formed under fire conditions.**

Carbon oxides

**11. TOXICOLOGICAL INFORMATION****Acute toxicity**

LD50 Oral - rat - 74,000 mg/kg

**Irritation and corrosion**

Skin - Human - Skin irritation - 3 d

Eyes - rabbit - Mild eye irritation

**Sensitisation**

no data available

**Chronic exposure**

no data available

**Signs and Symptoms of Exposure**

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

**Potential Health Effects**

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**Eyes** May cause eye irritation.  
**Ingestion** May be harmful if swallowed.

**12. ECOLOGICAL INFORMATION****Elimination information (persistence and degradability)**

no data available

**Ecotoxicity effects**

Toxicity to fish LC50 - Pimephales promelas (fathead minnow) - 205 mg/l - 96 h

**Further information on ecology**

no data available

**13. DISPOSAL CONSIDERATIONS****Product**

Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material.

**Contaminated packaging**

Dispose of as unused product.

**14. TRANSPORT INFORMATION****DOT (US)**

Not dangerous goods

**IMDG**

Not dangerous goods

**IATA**

Not dangerous goods

**15. REGULATORY INFORMATION****OSHA Hazards**

Irritant

**TSCA Status**

On TSCA Inventory

**DSL Status**

All components of this product are on the Canadian DSL list.

**SARA 302 Components**

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

**SARA 313 Components**

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**SARA 311/312 Hazards**

Acute Health Hazard

**Massachusetts Right To Know Components**

No Components Listed

**Pennsylvania Right To Know Components**

|            | CAS-No.  | Revision Date |
|------------|----------|---------------|
| Oleic acid | 112-80-1 | 1990-01-01    |

**New Jersey Right To Know Components**

|            | CAS-No.  | Revision Date |
|------------|----------|---------------|
| Oleic acid | 112-80-1 | 1990-01-01    |

**California Prop. 65 Components**

This product does not contain any chemicals known to State of California to cause cancer, birth, or any other reproductive defects.

**16. OTHER INFORMATION****Further information**

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