



Material Safety Data Sheet

Oleic acid

MSDS# 17305

Section 1 - Chemical Product and Company Identification

MSDS Name: Oleic acid

Catalog Numbers: AC270290000, AC270290050, AC270290250, AC378620000, A195-500, A195B-500

Synonyms: cis-9-Octadecenoic acid; red oil; a monounsaturated fatty acid; a component of almost all natural fats.

Company Identification: Fisher Scientific
One Reagent Lane
Fair Lawn, NJ 07410

For information in the US, call: 201-796-7100

Emergency Number US: 201-796-7100

CHEMTREC Phone Number, US: 800-424-9300

Section 2 - Composition, Information on Ingredients

CAS#: 112-80-1
Chemical Name: Oleic acid
%: >97
EINECS#: 204-007-1

Hazard Symbols: XI



Risk Phrases: 36/37/38

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Warning! Light sensitive. Air sensitive. Causes eye, skin, and respiratory tract irritation. Target Organs: Respiratory system, eyes, skin.

Potential Health Effects

Eye: Causes eye irritation.

Skin: Causes skin irritation. May be harmful if absorbed through the skin. Prolonged or repeated contact may dry/defat the skin and cause irritation.

Ingestion: May cause irritation of the digestive tract.

Inhalation: Causes respiratory tract irritation. May be harmful if inhaled.

Chronic: Prolonged or repeated skin contact may cause defatting and dermatitis.

Section 4 - First Aid Measures

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

Skin: Get medical aid if irritation develops or persists. Wash clothing before reuse. Flush skin with plenty of soap and water.

Ingestion: Never give anything by mouth to an unconscious person. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water. Wash mouth out with water. Get medical aid if irritation or symptoms occur.

Inhalation: Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid if cough or other symptoms appear.

Notes to Physician: Treat symptomatically and supportively.

Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Liquid will float and may reignite on the surface of water.

Extinguishing Media: Water or foam may cause frothing. Use dry chemical or carbon dioxide.

Autoignition Temperature: 363 deg C (685.40 deg F)

Flash Point: 184 deg C (363.20 deg F)

Explosion Limits: Not available
Lower:

Explosion Limits: Not available
Upper:

NFPA Rating: health: 2; flammability: 1; instability: 1;

Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Avoid runoff into storm sewers and ditches which lead to waterways. Clean up spills immediately, observing precautions in the Protective Equipment section. Provide ventilation.

Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation. Use with adequate ventilation. Wash clothing before reuse. Avoid contact with air and sunlight.

Storage: Store in a cool, dry, well-ventilated area away from incompatible substances. Absorbs oxygen from the air and will darken upon exposure.

Section 8 - Exposure Controls, Personal Protection

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Oleic acid	none listed	none listed	none listed

OSHA Vacated PELs: Oleic acid: None listed

Engineering Controls:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

Exposure Limits

Personal Protective Equipment

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

Skin: Wear appropriate gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

Section 9 - Physical and Chemical Properties

Physical State: Liquid

Color: colorless to pale red

Odor: lardlike

pH: Not available

Vapor Pressure: 1 mm Hg @ 177 deg C

Vapor Density: 9.7 (air=1)

Evaporation Rate: Negligible.

Viscosity: Not available

Boiling Point: 360 deg C (680.00°F)

Freezing/Melting Point: 13.4 deg C (56.12°F)

Decomposition Temperature:

Solubility in water: Insoluble

Specific Gravity/Density: 0.895 (water=1)

Molecular Formula: C18H34O2

Molecular Weight: 282.46

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures. Darkens on exposure to air. On exposure to air, acquires rancid odor.

Conditions to Avoid: High temperatures, incompatible materials, light, exposure to air, excess heat.

Incompatibilities with Other Materials: Strong oxidizing agents, perchloric acid, powdered aluminum.

Hazardous Decomposition Products: Carbon monoxide, carbon dioxide.

Hazardous Polymerization: Has not been reported.

Section 11 - Toxicological Information

RTECS#: CAS# 112-80-1: RG2275000

RTECS:

CAS# 112-80-1: Draize test, rabbit, eye: 100 mg Mild;

LD50/LC50: Oral, mouse: LD50 = 28 gm/kg;

Oral, rat: LD50 = 25 gm/kg;

Other: Human Skin Draize 15 mg/3D intermittent; REACTION: Moderate.

Carcinogenicity: Oleic acid - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.

Other: See actual entry in RTECS for complete information.

Section 12 - Ecological Information

Ecotoxicity: Fish: Fathead Minnow: LC50 = 205 mg/L; 96 Hr.; Static condition

Section 13 - Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

Section 14 - Transport Information

US DOT

Shipping Name: Not Regulated

Hazard Class:

UN Number:

Packing Group:

Canada TDG

Shipping Name: Not regulated as a hazardous material

Hazard Class:

UN Number:

Packing Group:

Section 15 - Regulatory Information

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: XI

Risk Phrases:

R 36/37/38 Irritating to eyes, respiratory system and skin.

Safety Phrases:

S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S 37/39 Wear suitable gloves and eye/face protection.

WGK (Water Danger/Protection)

CAS# 112-80-1: 1

Canada

CAS# 112-80-1 is listed on Canada's DSL List

Canadian WHMIS Classifications: D2B

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

CAS# 112-80-1 is listed on Canada's Ingredient Disclosure List

US Federal

TSCA

CAS# 112-80-1 is listed on the TSCA

Inventory.

Section 16 - Other Information

MSDS Creation Date: 6/09/1999

Revision #11 Date 7/20/2009

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.
