
MSDS**Material Safety Data Sheet****Contact : 091-02667-262303, 290210****Fax : 091-02667-262303****E-mail : halogens2003@yahoo.co.in**

From: HALOGENS**Block No. 511, Nr. Lasundra Stand,
Savli Road, Vill : TUNDAV - 391775****Ta : Savli, Dist : Baroda.****Gujarat (INDIA)****HALOGENS****An ISO 9001-2000 Certified Company
Manufacturing Of Fine Chemicals**

STEARIC ACID

1. Product Identification

Synonyms: Octadecanoic acid; 1-Heptadecanecarboxylic acid; Stearophanic acid; n-Octadecanoic acid

CAS No.: 57-11-4

Chemical Formula: C₁₈H₃₆O₂

2. Composition/Information on Ingredients

Ingredient	CAS No	Percent	Hazardous
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Stearic acid	57-11-4	100 %	NO

3. Hazards Identification

Emergency Overview

CAUTION! MAY CAUSE IRRITATION TO SKIN, EYES, AND RESPIRATORY TRACT.

SAF-T-DATA^(tm) Ratings (Provided here for your convenience)

Potential Acute Health Effects: Slightly hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation.

Potential Chronic Health Effects:

CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Not available.

TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available.

Repeated or prolonged exposure is not known to aggravate medical condition.

Potential Health Effects

Inhalation:

Inhalation of large amounts of dust may cause irritation to the respiratory tract.

Ingestion:

Extremely large oral dosages may produce gastrointestinal disturbances.

Skin Contact:

Possible irritation on prolonged contact with moist or sensitive areas of the skin.

Eye Contact:

No adverse effects expected but dust may cause mechanical irritation.

Chronic Exposure:

No information found.

Aggravation of Pre-existing Conditions:

No information found.

4. First Aid Measures

Eye Contact:

Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation occurs.

Skin Contact:

Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops.

Serious Skin Contact: Not available.

Inhalation:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention. Serious Inhalation: Not available.

Ingestion:

Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear. Serious Ingestion: Not available.

5. Fire Fighting Measures

Flammability of the Product : May be combustible at high temperature.

Auto-Ignition Temperature : 395°C (743°F)

Flash Points: CLOSED CUP : 196.11°C (385°F).

Flammable Limits : Not available.

Products of Combustion : These products are carbon oxides (CO, CO₂).

Fire Hazards in Presence of Various Substances:

Slightly flammable to flammable in presence of heat. Non-flammable in presence of shocks.

Explosion Hazards in Presence of Various Substances:

Slightly explosive in presence of open flames and sparks. Non-explosive in presence of shocks.

Fire Fighting Media and Instructions:

SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam.

Do not use water jet.

Special Remarks on Fire Hazards:

When heated to decomposition it emits acrid smoke and irritating fumes. As with most organic solids, fire is possible at elevated temperatures.

Special Remarks on Explosion Hazards:

Fine dust dispersed in air in sufficient concentrations, and in the presences of an ignition source is a potential dust explosion hazard

Emergency Overview

Small Spill:

Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements. Large Spill:

Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

7. Handling and Storage

Precautions:

Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest. Do not breathe dust. If ingested, seek medical advice immediately and show the container or the label. Keep away from incompatibles such as oxidizing agents, alkalis.

Storage: Keep container tightly closed. Keep container in a cool, well-ventilated area.

8. Exposure Controls/Personal Protection

Engineering Controls:

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Personal Protection: Safety glasses. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

Personal Protection in Case of a Large Spill:

Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product.

Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits:

TWA: 10 from ACGIH (TLV) [United States] Consult local authorities for acceptable exposure limits.

9. Physical and Chemical Properties

Physical state and appearance : Solid. (Crystalline solid. Powdered solid.)

Odor : Tallow-like (Slight.)

Taste : Not available.

Molecular Weight : 284.48 g/mole

Color : White to yellowish.

pH (1% soln/water) : Not applicable.

Boiling Point: Decomposition temperature: 350°C (662°F)

Melting Point : 69.4 (156.9°F)

Critical Temperature : Not available.

Specific Gravity : 0.9408 (Water = 1)

Vapor Pressure : Not applicable.

Vapor Density : 9.8(Air = 1)

Volatility : Not available.

Odor Threshold : 20 ppm

Water/Oil Dist. Coeff. : The product is more soluble in oil;
 $\log(\text{oil/water}) = 8.2$

Ionicity (in Water) : Not available.

Dispersion Properties : See solubility in water, diethyl ether, acetone.

Solubility:

Easily soluble in diethyl ether. Soluble in acetone. Insoluble in cold water, hot water. Slightly soluble in Ethanol. Soluble in alcohol, chloroform, carbon disulfide, carbon tetrachloride, amyl acetate, toluene. 1 gram dissolves in 21 ml alcohol, 5 ml benzene, 2 ml chloroform, 26 ml acetone, 6 ml carbon tetrachloride, 3.4 ml carbon disulfide.

10. Stability and Reactivity

Data Stability	: The product is stable.
Instability Temperature	: Not available.
Conditions of Instability	: Heat, incompatible materials, dust generation, ignition sources
Incompatibility with various substances:	Reactive with oxidizing agents, alkalis.
Corrosivity	: Non-corrosive in presence of glass
Special Remarks on Reactivity	: Not available.
Special Remarks on Corrosivity	: Not available.
Polymerization	: Will not occur.

11. Toxicological Information

Routes of Entry : Inhalation. Ingestion.

Toxicity to Animals :

Acute oral toxicity (LD50) : 4640 mg/kg [Rat]. Acute dermal toxicity (LD50): >5000 mg/kg [Rabbit].

Chronic Effects on Humans: Not available.

Other Toxic Effects on Humans: Slightly hazardous in case of skin contact (irritant), of ingestion, of inhalation.

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans: May cause cancer based on animal test data

Special Remarks on other Toxic Effects on Humans:

Acute Potential Health Effects: May cause skin irritation. Eyes: May cause eye irritation. Inhalation: May cause respiratory tract irritation. Symptoms may include coughing, sore throat, labored breathing, and chest pain. Ingestion: Ingestion of large oral doses may cause irritation to the gastrointestinal tract. Ingestion may also cause intestinal obstruction.

12. Ecological Information

Ecotoxicity : Not available.

BOD5 and
COD : Not available.

Products of Biodegradation : Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: The product itself and its products of degradation are not toxic.

Special Remarks on the Products of Biodegradation: Not available.

13. Disposal Considerations

Waste Disposal:

Waste must be disposed of in accordance with federal, state and local environmental control regulations.

14. Transport Information

Not regulated.

15. Regulatory Information

Federal and State Regulations: TSCA 8(b) inventory: Stearic acid

Other Regulations: EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances.

Other Classifications:

WHMIS (Canada): Not controlled under WHMIS (Canada).

DSCL (EEC):

This product is not classified according to the EU regulations. Not applicable.

HMIS (U.S.A.):

Health Hazard	: 1
Fire Hazard	: 1
Reactivity	: 0
Personal Protection	: E

National Fire Protection Association (U.S.A.):

Health	: 1
Flammability	: 1

Reactivity : 0
Specific hazard : NA

Protective Equipment:

Gloves, Lab coat, Dust respirator. Be sure to use an approved/certified respirator or equivalent Safety glasses.

16. Other Information

Disclaimer:

HALOGENS provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose
