

MATERIAL SAFETY DATA SHEET

Stearic Acid

Section 1 - Chemical Product and Company Identification

| | |
|-------------------|-------------------|
| MSDS Name: | Stearic Acid |
| Synonyms: | Octadecanoic acid |

| | |
|-------------------------------------|---|
| Company Identification: (INDIA) | Veritas House, 70 Mint Road, Fort, Mumbai - 400 001. INDIA |
| For information in the INDIA, call: | Tel: +91 - 22 - 2275 5555 / 6184 0000, Fax: +91 - 22 - 2275 5556 / 6184 0001 |

Section 2 - Composition, Information on Ingredients

| CAS# | Chemical Name: | % | EINECS# |
|---------|----------------|-----|-----------|
| 57-11-4 | Stearic acid | 90% | 200-313-4 |

| | |
|--|--|
| Hazard Symbols: | XI F |
|  |  |
| Risk Phrases: | 11 36/37/38 |

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Highly flammable. Irritating to eyes, respiratory system and skin.

Potential Health Effects

| | |
|--------------------|---|
| Eye: | Causes eye irritation. |
| Skin: | Causes mild skin irritation. May be harmful if absorbed through the skin. |
| Ingestion: | May cause irritation of the digestive tract. May be harmful if swallowed. |
| Inhalation: | Causes respiratory tract irritation. May be harmful if inhaled. |
| Chronic: | |

Section 4 - First Aid Measures

| | |
|----------------------------|---|
| Eyes: | 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. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. |
| Ingestion: | Get medical aid. Wash mouth out with water. |
| 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. |
| 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. Material will burn in a fire. Combustible solid. Dangerous fire hazard in the form of dust when exposed to heat or flame. |
| Extinguishing Media: | Use water spray, dry chemical, carbon dioxide, or chemical foam. |

Section 6 - Accidental Release Measures

| | |
|-----------------------------|---|
| General Information: | Use proper personal protective equipment as indicated in Section 8. |
| Spills/Leaks: | Vacuum or sweep up material and place into a suitable disposal container. Use a spark-proof tool. |

Section 7 - Handling and Storage

| | |
|------------------|--|
| Handling: | Use spark-proof tools and explosion proof equipment. Avoid breathing dust, vapor, mist, or gas. Avoid contact with skin and eyes. Keep away from heat, sparks & flame. |
| Storage: | Keep away from heat, sparks, and flame. Store in a cool, dry place. Store in a tightly closed container. Keep from contact with oxidizing materials. Flammables-area. |

Section 8 - Exposure Controls, Personal Protection

| | |
|--------------------------------------|---|
| Engineering Controls: | Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local explosion-proof ventilation to keep airborne levels to acceptable levels. |
| Exposure Limits | CAS# 57-11-4: |
| Personal Protective Equipment | |
| Eyes: | Wear chemical splash goggles. |
| Skin: | Wear appropriate protective gloves to prevent skin exposure. |
| Clothing: | Wear appropriate protective clothing to prevent skin exposure. |
| Respirators: | Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced. |

Section 9 - Physical and Chemical Properties

| | |
|----------------------------------|--------------------------------|
| Physical State: | Flakes |
| Color: | white |
| Odor: | fatty odor |
| pH: | Not available |
| Vapor Pressure: | 1mmHg @174 deg C |
| Viscosity: | Not available |
| Boiling Point: | 361 deg C @760mmHg (681.80°F) |
| Freezing/Melting Point: | 67 - 69 deg C |
| Autoignition Temperature: | 395 deg C (743.00 deg F) |
| Flash Point: | 196 deg C (384.80 deg F) |
| Explosion Limits: Lower: | Not available |

| | |
|-----------------------------------|------------------|
| Explosion Limits: Upper: | Not available |
| Decomposition Temperature: | Not available |
| Solubility in water: | Slightly soluble |
| Specific Gravity/Density: | 0.840 |
| Molecular Formula: | C18H36O2 |
| Molecular Weight: | 284.47 |

Section 10 - Stability and Reactivity

| | |
|---|---|
| Chemical Stability: | Stable under normal temperatures and pressures. |
| Conditions to Avoid: | Incompatible materials, ignition sources, excess heat. |
| Incompatibilities with Other Materials | Strong oxidizing agents, strong oxidizing agents, reducing agents, bases. |
| Hazardous Decomposition Products | Carbon monoxide, carbon dioxide. |
| Hazardous Polymerization | Will not occur. |

Section 11 - Toxicological Information

| | |
|-------------------------|--|
| RTECS#: | CAS# 57-11-4: WI2800000 |
| LD50/LC50: | RTECS: CAS# 57-11-4: Draize test, rabbit, skin: 500 mg/24H Moderate; Skin, rabbit: LD50 = >5 gm/kg; Other: oral rat LD10 = 4640 mg/kg |
| Carcinogenicity: | Stearic acid - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65. |
| Other: | See actual entry in RTECS for complete information. The toxicological properties have not been fully investigated. |

Section 12 - Ecological Information

Not available

Section 13 - Disposal Considerations

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

Section 14 - Transport Information

| | IATA | IMO | RID/ADR |
|-----------------------|-----------------------------------|----------------------------------|----------------------------------|
| Shipping Name: | FLAMMABLE SOLID, ORGANIC, N.O.S.* | FLAMMABLE SOLID, ORGANIC, N.O.S. | FLAMMABLE SOLID, ORGANIC, N.O.S. |
| Hazard Class: | 4.1 | 4.1 | 4.1 |
| UN Number: | 1325 | 1325 | 1325 |
| Packing Group: | III | III | III |

Section 15 - Regulatory Information

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: XI F

Risk Phrases:

- R 11 Highly flammable.
- R 36/37/38 Irritating to eyes, respiratory system and skin.

Safety Phrases:

- S 16 Keep away from sources of ignition - No smoking.
- 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# 57-11-4: 0

Canada

- CAS# 57-11-4 is listed on Canada's DSL List

US Federal

- TSCA
- CAS# 57-11-4 is listed on the TSCA Inventory.

Section 16 - Other Information

| | |
|----------------------------|---------------|
| MSDS Creation Date: | July 26, 2015 |
| Revision #1 Date | |

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.