

# 12-Hydroxystearic Acid

## Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations  
Revision Date: 12/12/2016 Date of Issue: 10/21/2013 Supersedes: 11/07/2014

Version: 2.0

### SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY

#### 1.1. Product Identifier

**Product Form:** Substance

**Product Name:** 12-Hydroxystearic Acid

**CAS No:** 106-14-9

**Synonyms:** 12-Hydroxystearic Acid, 12-HSA

#### 1.2. Intended Use of the Product

**Use of the substance/mixture:** Thickener for lithium grease

#### 1.3. Name, Address, and Telephone of the Responsible Party

##### Company

Acme-Hardesty Co.  
450 Sentry Parkway  
Blue Bell, PA 19422  
T 866-226-3834 T 215-591-3610  
www.acme-hardesty.com

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#### 1.4. Emergency Telephone Number

**Emergency Number** : 800-424-9300

For Chemical Emergency, Spill, Leak, Fire, Exposure, or Accident, call CHEMTREC – Day or Night

### SECTION 2: HAZARDS IDENTIFICATION

#### 2.1. Classification of the Substance or Mixture

##### Classification (GHS-US)

Not classified

#### 2.2. Label Elements

##### GHS-US Labeling

No labeling applicable

#### 2.3. Other Hazards

**Other Hazards Not Contributing to the Classification:** Hazardous to the aquatic environment - Chronic Hazard Category 3. The component classification is for finely ground powder. The product in its final form is of waxy, oily flakes, therefore the component classification does not apply to the finished product.

#### 2.4. Unknown Acute Toxicity (GHS-US)

No data available

### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.1. Substance

| Name                           | Product Identifier | %   | Classification (GHS-US) |
|--------------------------------|--------------------|-----|-------------------------|
| Octadecanoic acid, 12-hydroxy- | (CAS No) 106-14-9  | 100 | Comb. Dust              |

#### 3.2. Mixture

Not applicable

Full text of H-phrases: see section 16

### SECTION 4: FIRST AID MEASURES

#### 4.1. Description of First Aid Measures

**First-aid Measures General:** Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

**First-aid Measures After Inhalation:** When symptoms occur: go into open air and ventilate suspected area.

**First-aid Measures After Skin Contact:** Remove contaminated clothing. Drench affected area with water for at least 15 minutes.

**First-aid Measures After Eye Contact:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

**First-aid Measures After Ingestion:** Rinse mouth. Do NOT induce vomiting.

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### 4.2. Most Important Symptoms and Effects, Both Acute and Delayed

**Symptoms/Injuries:** Prolonged contact with large amounts of dust may cause mechanical irritation.

**Symptoms/Injuries After Inhalation:** Dust of the product, if present, may cause respiratory irritation after an excessive inhalation exposure.

**Symptoms/Injuries After Skin Contact:** Not irritating to skin.

**Symptoms/Injuries After Eye Contact:** Dust from this product may cause minor eye irritation.

**Symptoms/Injuries After Ingestion:** May cause nausea, vomiting, and diarrhea.

### 4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If medical advice is needed, have product container or label at hand.

## SECTION 5: FIREFIGHTING MEASURES

### 5.1. Extinguishing Media

**Suitable Extinguishing Media:** Dry chemical, water spray, regular foam. Sand.

### 5.2. Special Hazards Arising From the Substance or Mixture

**Fire Hazard:** Not considered flammable but may burn at high temperatures.

**Explosion Hazard:** Product is not explosive.

**Reactivity:** Stable at ambient temperature and under normal conditions of use.

### 5.3. Advice for Firefighters

**Firefighting Instructions:** Exercise caution when fighting any chemical fire.

**Protection During Firefighting:** Do not enter fire area without proper protective equipment, including respiratory protection.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### 6.1. Personal Precautions, Protective Equipment and Emergency Procedures

**General Measures:** Do not allow product to spread into the environment. Avoid generating dust. Can be slippery on hard, smooth walking area.

#### 6.1.1. For Non-emergency Personnel

**Protective Equipment:** Use appropriate personal protection equipment (PPE).

**Emergency Procedures:** Evacuate unnecessary personnel.

#### 6.1.2. For Emergency Responders

**Protective Equipment:** Equip cleanup crew with proper protection.

**Emergency Procedures:** Ventilate area.

### 6.2. Environmental Precautions

Prevent entry to sewers and public waters. Avoid release to the environment.

### 6.3. Methods and Material for Containment and Cleaning Up

**For Containment:** Contain and collect as any solid.

**Methods for Cleaning Up:** Clear up spills immediately and dispose of waste safely.

### 6.4. Reference to Other Sections

See heading 8, Exposure Controls and Personal Protection.

## SECTION 7: HANDLING AND STORAGE

### 7.1. Precautions for Safe Handling

**Precautions for Safe Handling:** Use and store in a well ventilated area. Avoid temperature higher than 72°C.

**Hygiene Measures:** Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work.

### 7.2. Conditions for Safe Storage, Including Any Incompatibilities

**Storage Conditions:** Store in a dry, cool and well-ventilated place. Keep container closed when not in use. Keep away from heat/sparks/open flames/hot surfaces. – No smoking.

**Incompatible Products:** Strong bases. Strong oxidizers.

**Storage Temperature:** ≤ 72 °C (161.6 °F) In bulk, store at about 5-10 °C above melting point or at ambient temperature.

**Storage Area:** Temperature higher than necessary degrades quality at rates dependent on time and temperature of exposure.

**Special Rules on Packaging:** Stainless steel preferred for storage.

### 7.3. Specific End Use(s)

No additional information available

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Control Parameters

For substances listed in section 3 that are not listed here, there are no established exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), NIOSH (REL), or OSHA (PEL).

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### 8.2. Exposure Controls

**Appropriate Engineering Controls** : Avoid dust production. Ground/bond container and receiving equipment.

**Personal Protective Equipment** : Gloves. Protective goggles.



**Hand Protection** : Rubber gloves.

**Eye Protection** : Chemical goggles or safety glasses.

**Respiratory Protection** : If exposure limits are exceeded or irritation is experienced, NIOSH approved respiratory protection should be worn.

**Other Information** : When using, do not eat, drink or smoke.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on Basic Physical and Chemical Properties

|   |                                  |
|---|----------------------------------|
| <b>Physical State</b>                             | : Solid                          |
| <b>Appearance</b>                                 | : White to cream-colored flakes. |
| <b>Odor</b>                                       | : Natural, non-offending.        |
| <b>Odor Threshold</b>                             | : No data available              |
| <b>pH</b>   | : No data available              |
| <b>Relative Evaporation Rate (butylacetate=1)</b> | : No data available              |
| <b>Melting Point</b>                              | : 72 - 77 °C (161.6-170.6°F)     |
| <b>Freezing Point</b>                             | : No data available              |
| <b>Boiling Point</b>                              | : > 300 °C (572°F) (572.00 °F)   |
| <b>Flash Point</b>                                | : > 210 °C (410°F) (410.00 °F)   |
| <b>Auto-ignition Temperature</b>                  | : No data available              |
| <b>Decomposition Temperature</b>                  | : No data available              |
| <b>Flammability (solid, gas)</b>                  | : No data available              |
| <b>Vapor Pressure</b>                             | : No data available              |
| <b>Relative Vapor Density at 20 °C</b>            | : No data available              |
| <b>Relative Density</b>                           | : No data available              |
| <b>Specific Gravity</b>                           | : 0.95 g/l @25°C                 |
| <b>Solubility</b>                                 | : Insoluble.                     |
| <b>Partition Coefficient: N-Octanol/Water</b>     | : Not available                  |
| <b>Viscosity</b>                                  | : Not available                  |
| <b>Viscosity, Dynamic</b>                         | : 17 cP @93°C                    |
| <b>Explosive Properties</b>                       | : No data available              |
| <b>Oxidizing Properties</b>                       | : No data available              |
| <b>Explosive Limits</b>                           | : Not applicable                 |

**9.2. Other Information** No additional information available

## SECTION 10: STABILITY AND REACTIVITY

- 10.1 Reactivity:** Stable at ambient temperature and under normal conditions of use.
- 10.2 Chemical Stability:** The product is stable at normal handling and storage conditions.
- 10.3 Possibility of Hazardous Reactions:** Hazardous polymerization will not occur.
- 10.4 Conditions to Avoid:** Avoid ignition sources.
- 10.5 Incompatible Materials:** Strong bases. Strong oxidizers.
- 10.6 Hazardous Decomposition Products:** Carbon oxides (CO, CO<sub>2</sub>).

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1. Information On Toxicological Effects

**Acute Toxicity** : Not classified

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**Skin Corrosion/Irritation:** Not classified

**Serious Eye Damage/Irritation:** Not classified

**Respiratory or Skin Sensitization:** Not classified

**Germ Cell Mutagenicity:** Not classified

**Carcinogenicity:** Not classified

### 12-Hydroxystearic Acid (106-14-9)

**Reproductive Toxicity:** Not classified

**Specific Target Organ Toxicity (Single Exposure):** Not classified

### 12-Hydroxystearic Acid (106-14-9)

**Specific Target Organ Toxicity (Repeated Exposure):** Not classified

**Aspiration Hazard:** Not classified

**Symptoms/Injuries After Inhalation:** Dust of the product, if present, may cause respiratory irritation after an excessive inhalation exposure.

**Symptoms/Injuries After Skin Contact:** Not irritating to skin.

**Symptoms/Injuries After Eye Contact:** Dust from this product may cause minor eye irritation.

**Symptoms/Injuries After Ingestion:** May cause nausea, vomiting, and diarrhea.

## SECTION 12: ECOLOGICAL INFORMATION

### 12.1. Toxicity

**Ecology - General** : Harmful to aquatic life with long lasting effects.

### 12-Hydroxystearic Acid (106-14-9)

### 12.2. Persistence and Degradability

### 12-Hydroxystearic Acid (106-14-9)

**Persistence and Degradability** | May cause long-term adverse effects in the environment.

### 12.3. Bioaccumulative Potential

### 12-Hydroxystearic Acid (106-14-9)

**Bioaccumulative Potential** | Not established.

**12.4. Mobility in Soil** No additional information available

### 12.5. Other Adverse Effects

**Other Information** : Avoid release to the environment.

## SECTION 13: DISPOSAL CONSIDERATIONS

### 13.1. Waste treatment methods

**Waste Disposal Recommendations:** Dispose of waste material in accordance with all local, regional, national, and international regulations.

**Ecology – Waste Materials:** This material is hazardous to the aquatic environment. Keep out of sewers and waterways.

## SECTION 14: TRANSPORT INFORMATION

In Accordance With ICAO/IATA/IMDG/DOT

**14.1. UN Number** Not regulated for transport

**14.2. UN Proper Shipping Name** Not regulated for transport

### 14.3. Additional Information

**Other information** : No supplementary information available.

**Transport by Sea** Not regulated for transport

**Air Transport** Not regulated for transport

## SECTION 15: REGULATORY INFORMATION

### 15.1 US Federal Regulations

### Octadecanoic acid, 12-hydroxy- (106-14-9)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

**15.2 US State Regulations** Neither this product nor its chemical components appear on any US state lists.

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### SECTION 16: OTHER INFORMATION

**Revision Date** : 12/12/2016  
**Version** : 2  
**Other Information** : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

**GHS Full Text Phrases:**

|            |   |
|------------|---|
| Comb. Dust | Combustible Dust                                |
| H232       | May form combustible dust concentrations in air |

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