



# Stearic Acid 92%

## Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations  
Revision Date: 03/23/2015 Date of Issue: 09/06/2012

Version: 2.0

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

#### 1.1. Product Identifier

**Product Form:** Mixture

**Product Name:** Stearic Acid 92%

**CAS No:** 57-11-4, 67701-03-5, 57-10-3

**Synonyms:** Octadecanoic acid

#### 1.2. Intended Use of the Product

**Use of the substance/mixture:** Per FDA 21CFR - Coatings on fresh citrus fruit, chewing gum base, fatty acids, defoaming agents, adhesives, resinous and polymeric coatings, stearic acid

#### 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

#### 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

No additional information available

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

No data available

### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.1. Substance

Not applicable

#### 3.2. Mixture

Name	Product Identifier	%	Classification (GHS-US)
Stearic acid	(CAS No) 57-11-4	92 - 100	Not classified
Hexadecanoic acid	(CAS No) 57-10-3	< 8	Not classified
Fatty acids, C16-18	(CAS No) 67701-03-5	<= 2	Not classified

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. Remove to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER/doctor/physician if you feel unwell.

**First-aid Measures After Skin Contact:** Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention.

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**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.

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

**Symptoms/Injuries:** None expected under normal conditions of use.

**Symptoms/Injuries After Inhalation:** May cause respiratory irritation.

**Symptoms/Injuries After Skin Contact:** Contact during a long period may cause slight irritation.

**Symptoms/Injuries After Eye Contact:** May cause slight irritation to eyes.

**Symptoms/Injuries After Ingestion:** May cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

### 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:** Use extinguishing media appropriate for surrounding fire. Carbon dioxide, dry chemical. Sand.

**Unsuitable Extinguishing Media:** Do not use water jet.

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

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

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

**Reactivity:** No reactivity hazard other than the effects described in sub-sections below.

### 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.

**Other Information:** Liquid product may have temperature exceeding 50°C.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

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

**General Measures:** Handle in accordance with good industrial hygiene and safety practice.

#### 6.1.1. For Non-emergency Personnel

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

**Emergency Procedures:** Evacuate unnecessary personnel. Evacuate unnecessary personnel.

#### 6.1.2. For Emergency Responders

**Protective Equipment:** Equip cleanup crew with proper protection. Use appropriate personal protection equipment (PPE).

**Emergency Procedures:** Ventilate area.

### 6.2. Environmental Precautions

Prevent entry to sewers and public waters.

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

**Methods for Cleaning Up:** Clean 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:** Avoid breathing dust. Use only outdoors or in a well-ventilated area. Handle in accordance with good industrial hygiene and safety procedures. Wear recommended personal protective equipment.

**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 and direct sunlight.

**Incompatible Products:** Strong oxidizers.

**7.3. Specific End Use(s)** Per FDA 21CFR - Coatings on fresh citrus fruit, chewing gum base, fatty acids, defoaming agents, adhesives, resinous and polymeric coatings, stearic acid

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### 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).

#### 8.2. Exposure Controls

**Appropriate Engineering Controls** : Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed.

**Personal Protective Equipment** : Gloves. Insufficient ventilation: wear respiratory protection. Protective goggles.



**Hand Protection** : Wear chemically resistant protective gloves.

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

**Skin and Body Protection** : Wear suitable protective clothing.

**Respiratory Protection** : Wear approved mask.

**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. Flakes, beads, powder. In bulk, liquid.
<b>Odor</b>	: Slight.
<b>Odor Threshold</b>	: No data available
<b>pH</b>	: Not applicable
<b>Relative Evaporation Rate (butylacetate=1)</b>	: No data available
<b>Melting Point</b>	: 64.9 - 69.3 °C (148.82 - 156.74 °F)
<b>Freezing Point</b>	: No data available
<b>Boiling Point</b>	: 383 - 385.8 °C (721.4 - 726.44 °F)
<b>Flash Point</b>	: 200 °C (356°F) ASTM D92 (392.00 °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>	: ~ 8.54E-8 hPa (~ 6E-6 mm Hg)
<b>Relative Vapor Density at 20 °C</b>	: No data available
<b>Relative Density</b>	: No data available
<b>Specific Gravity</b>	: 0.87 g/cm <sup>3</sup> @ 20°C
<b>Specific gravity / density</b>	: 7.26 lb/gal
<b>Solubility</b>	: Water: 5E-5 g/L @ 20°C
<b>Partition Coefficient: N-Octanol/Water</b>	: 8.23 log Pow
<b>Log Pow</b>	: 7.05 - 8.23 (ASTM D445)
<b>Viscosity</b>	: Not available
<b>Viscosity, Kinematic</b>	: 12 mm <sup>2</sup> /s @70°C (ASTM D445)
<b>Viscosity, Dynamic</b>	: 9.87 mPa.s
<b>Explosive Properties</b>	: No data available
<b>Oxidizing Properties</b>	: No data available
<b>Explosive Limits</b>	: Not applicable

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### 9.2. Other Information No additional information available

## SECTION 10: STABILITY AND REACTIVITY

**10.1 Reactivity:** No reactivity hazard other than the effects described in sub-sections below.

**10.2 Chemical Stability:** Stable under normal temperature and pressure.

**10.3 Possibility of Hazardous Reactions:** Hazardous polymerization will not occur.

**10.4 Conditions to Avoid:** Direct sunlight. Avoid high temperatures.

**10.5 Incompatible Materials:** 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

#### Stearic Acid 92% ( \f )57-11-4, 67701-03-5, 57-10-3

##### Fatty acids, C16-18 (67701-03-5)

LD50 Oral Rat	> 5000 mg/kg
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LD50 Dermal Rabbit	> 2000 mg/kg
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LC50 Inhalation Rat (mg/l)	> 0.16 mg/l/4h
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##### Stearic acid (57-11-4)

LD50 Oral Rat	> 5000 mg/kg
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LD50 Dermal Rat	> 2000 mg/kg
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##### Hexadecanoic acid (57-10-3)

LD50 Dermal Rabbit	> 2000 mg/kg
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ATE (Vapors)	0.162 mg/l/4h
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**Skin Corrosion/Irritation:** Not classified

**pH:** Not applicable

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

**pH:** Not applicable

**Respiratory or Skin Sensitization:** Not classified

**Germ Cell Mutagenicity:** Not classified

**Carcinogenicity:** Not classified

#### Stearic Acid 92% (57-11-4, 67701-03-5, 57-10-3)

**Reproductive Toxicity:** Not classified

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

#### Stearic Acid 92% (57-11-4, 67701-03-5, 57-10-3)

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

**Aspiration Hazard:** Not classified

**Symptoms/Injuries After Inhalation:** May cause respiratory irritation.

**Symptoms/Injuries After Skin Contact:** Contact during a long period may cause slight irritation.

**Symptoms/Injuries After Eye Contact:** May cause slight irritation to eyes.

**Symptoms/Injuries After Ingestion:** May cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

## SECTION 12: ECOLOGICAL INFORMATION

### 12.1. Toxicity

#### Fatty acids, C16-18 (67701-03-5)

LC50 Fish 1	> 10000 mg/l
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EC50 Daphnia 1	> 4.8 mg/l
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NOEC chronic algae	> 0.9 mg/l
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#### Hexadecanoic acid (57-10-3)

LC50 Fish 1	150 mg/l (Exposure time: 96 h - Species: Oryzias latipes)
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### 12.2. Persistence and Degradability

#### Stearic Acid 92% (57-11-4, 67701-03-5, 57-10-3)

Persistence and Degradability	Easily biodegradable.
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### 12.3. Bioaccumulative Potential

Stearic Acid 92% (57-11-4, 67701-03-5, 57-10-3)	
Bioconcentration factor (BCF REACH)	225 L/kg
Log Pow	7.05 - 8.23 (ASTM D445)
Bioaccumulative Potential	Based on the n-octanol/water partition coefficient accumulation in organisms is not expected.

### 12.4. Mobility in Soil

Stearic acid (57-11-4)	
Log Koc	51.05

  

Hexadecanoic acid (57-10-3)	
Log Koc	13.23

### 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.

## 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

Fatty acids, C16-18 (67701-03-5)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	

  

Stearic acid (57-11-4)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	

  

Hexadecanoic acid (57-10-3)	
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.

## SECTION 16: OTHER INFORMATION

**Revision Date** : 03/23/2015

**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:

*The data herein are based on our current knowledge and believed to be reliable. Acme-Hardesty Co., provides this information without any representation or warranty, expressed or implied, regarding its accuracy or correctness.*

*Users must make their own determination that handling, storage, use and disposal of the product in the anticipated manner is safe and appropriate. Because these actions of the user are out of our control, and may be beyond our knowledge, we do not assume responsibility and expressly disclaim liability for loss, damage, expense or any other claim arising out of or in any way connected with the handling, storage, use or disposal of the product or container.*

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