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

1.1. Product Identifier
Product Form: Mixture
Product Name: Triple Pressed Stearic Acid FGK
CAS No: 67701-03-5, 57-11-4, 544-63-8
Synonyms: Palmitic Acid 55%

1.2. Intended Use of the Product
Use of the substance/mixture: Per FDA 21CFR: Coatings on fresh citrus fruit, chewing gum. Personal Care Products - Emulsifier for Creams and Lotions, and Shaving Cream Formulations

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

<table>
<thead>
<tr>
<th>Name</th>
<th>Product Identifier</th>
<th>%</th>
<th>Classification (GHS-US)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stearic acid (CAS No)</td>
<td>57-11-4</td>
<td>32 - 72</td>
<td>Comb. Dust, H232</td>
</tr>
<tr>
<td>Fatty acids, C16-18</td>
<td>67701-03-5</td>
<td>27 - 66</td>
<td>Comb. Dust, H232</td>
</tr>
<tr>
<td>Tetradecanoic acid</td>
<td>544-63-8</td>
<td>&lt;= 1.5</td>
<td>Eye Irrit. 2A, H319</td>
</tr>
</tbody>
</table>

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.

4.2. Most Important Symptoms and Effects, Both Acute and Delayed
Symptoms/Injuries: None expected under normal conditions of use.
Symptoms/Injuries After Inhalation: None expected under normal conditions of use.
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: If a large quantity has been ingested: 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: Use extinguishing media appropriate for surrounding fire. Sand. Carbon dioxide, dry chemical.
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: Hazardous reactions will not occur under normal conditions.

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).

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.

6.3. Methods and Material for Containment and Cleaning Up
For Containment: Contain and collect as any solid.
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
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. Personal Care Products - Emulsifier for Creams and Lotions, and Shaving Cream Formulations

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 and safety showers should be available in the immediate vicinity of any potential exposure. Ensure all national/local regulations are observed.

Personal Protective Equipment: Gloves. Protective goggles.

Hand Protection: Wear chemically resistant protective gloves.

Eye Protection: Chemical goggles or safety glasses.

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

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State</td>
<td>Solid</td>
</tr>
<tr>
<td>Appearance</td>
<td>white. Waxy. Flakes, beads, powder.</td>
</tr>
<tr>
<td>Odor</td>
<td>No data available</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative Evaporation Rate (butylacetate=1)</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting Point</td>
<td>55 - 60 °C (131-140°F) (131 - 140 °F)</td>
</tr>
<tr>
<td>Freezing Point</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>&gt; 300 °C (572°F) (572 °F)</td>
</tr>
<tr>
<td>Flash Point</td>
<td>&gt; 200 °C (392°F) (392 °F)</td>
</tr>
<tr>
<td>Auto-ignition Temperature</td>
<td>&gt; 250 °C (482°F) (482 °F)</td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>&lt; 1 mm Hg @ 131°C 5.06E-5 hPa @ 250°C</td>
</tr>
<tr>
<td>Relative Vapor Density at 20 °C</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative Density</td>
<td>No data available</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>0.85 g/ml @ 75°C</td>
</tr>
<tr>
<td>Solubility</td>
<td>Insoluble in water.</td>
</tr>
<tr>
<td></td>
<td>Water: Ca. 5E-5 g/L @20°C</td>
</tr>
<tr>
<td></td>
<td>Ethanol: Soluble.</td>
</tr>
<tr>
<td></td>
<td>Ether: Soluble.</td>
</tr>
<tr>
<td></td>
<td>Organic solvent:Soluble.</td>
</tr>
<tr>
<td>Partition Coefficient: N-Octanol/Water</td>
<td>Not available</td>
</tr>
<tr>
<td>Log Pow</td>
<td>7.05 - 8.23 Based on n-octanol/water segregation coefficient</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Not available</td>
</tr>
<tr>
<td>Viscosity, Dynamic</td>
<td>8.04 mPa.s @65°C</td>
</tr>
<tr>
<td>Explosive Properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Oxidizing Properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive Limits</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

9.2. Other Information: No additional information available

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity: Hazardous reactions will not occur under normal conditions.

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. Extremely high or low temperatures.
10.5 Incompatible Materials: Strong oxidizers.
10.6 Hazardous Decomposition Products: Carbon oxides (CO, CO2).

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information On Toxicological Effects

Acute Toxicity: Not classified

<table>
<thead>
<tr>
<th>Compound</th>
<th>LD50 Oral Rat</th>
<th>LD50 Dermal Rabbit</th>
<th>LC50 Inhalation Rat (mg/l)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fatty acids, C16-18 (67701-03-5)</td>
<td>&gt; 5000 mg/kg</td>
<td>&gt; 2000 mg/kg</td>
<td>&gt; 0.16 mg/l/4h</td>
</tr>
<tr>
<td>Stearic acid (57-11-4)</td>
<td>&gt; 5000 mg/kg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tetradecanoic acid (544-63-8)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50 Oral Rat</td>
<td>&gt; 10 g/kg</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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
Reproductive Toxicity: Not classified
Specific Target Organ Toxicity (Single Exposure): Not classified
Specific Target Organ Toxicity (Repeated Exposure): Not classified
Aspiration Hazard: Not classified
Symptoms/Injuries After Inhalation: None expected under normal conditions of use.
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: If a large quantity has been ingested: May cause nausea, vomiting, and diarrhea.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

<table>
<thead>
<tr>
<th>Compound</th>
<th>LC50 Fish 1</th>
<th>EC50 Daphnia 1</th>
<th>NOEC chronic algae</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fatty acids, C16-18 (67701-03-5)</td>
<td>&gt; 10000 mg/l</td>
<td>&gt; 4.8 mg/l</td>
<td>&gt; 0.9 mg/l</td>
</tr>
<tr>
<td>Tetradecanoic acid (544-63-8)</td>
<td>118 mg/l (Exposure time: 96 h - Species: Oryzias latipes [static])</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

12.2. Persistence and Degradability

<table>
<thead>
<tr>
<th>Compound</th>
<th>Persistence and Degradability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fatty acids, C16-18 (67701-03-5)</td>
<td>Easily biodegradable</td>
</tr>
<tr>
<td>Tetradecanoic acid (544-63-8)</td>
<td></td>
</tr>
</tbody>
</table>

12.3. Bioaccumulative Potential

<table>
<thead>
<tr>
<th>Compound</th>
<th>Log Pow</th>
<th>Bioaccumulative Potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fatty acids, C16-18 (67701-03-5)</td>
<td>7.05 - 8.23 Based on n-octanol/water segregation coefficient</td>
<td></td>
</tr>
<tr>
<td>Tetradecanoic acid (544-63-8)</td>
<td>5.9</td>
<td>Not established.</td>
</tr>
</tbody>
</table>

12.4. Mobility in Soil

<table>
<thead>
<tr>
<th>Compound</th>
<th>Log Koc</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stearic acid (57-11-4)</td>
<td>51.05</td>
</tr>
</tbody>
</table>
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
Tetradecanoic acid (544-63-8)
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: 05/14/2015
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:

- Comb. Dust
- Eye Irrit. 2A
- H232
- H319

Combustible Dust
Serious eye damage/eye irritation Category 2A
May form combustible dust concentrations in air
Causes serious eye irritation

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.

ACME Hardesty US GHS SDS