



ACME-HARDESTY
A division of
JACOB STERN & SONS, INC.
- SINCE 1857 -

Palmitic Acid 95% FGK

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations
Date of Issue: 05/22/2015 Supersedes: 03/29/2008

Version: 2.0

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

1.1. Product Identifier

Product Form: Mixture

Product Name: Palmitic Acid 95% FGK

CAS No: 57-10-3; 57-11-4; 143-07-7; 544-63-9

Synonyms: Hexadecanoic Acid

1.2. Intended Use of the Product

Use of the substance/mixture: Per FDA 21CFR - Coatings on fresh citrus fruit, Fatty acids, In foods as a lubricant, binder, & defoaming agents & as a component in manufacturing of other "food grade" additives, Mono- and diglycerides

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)

Eye Irrit. 2A H319

Full text of H-phrases: see section 16

2.2. Label Elements

GHS-US Labeling

Hazard Pictograms (GHS-US)



GHS07

Signal Word (GHS-US)

: Warning

Hazard Statements (GHS-US)

: H319 - Causes serious eye irritation

Precautionary Statements (GHS-US)

: P264 - Wash hands, forearms, and other exposed areas thoroughly after handling.
P280 - Wear protective gloves, protective clothing, and eye protection.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes.
Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313 - If eye irritation persists: Get medical advice/attention.

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)
Hexadecanoic acid	(CAS No) 57-10-3	>= 95	Not classified

Palmitic Acid 95% FGK

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Stearic acid	(CAS No) 57-11-4	<= 3	Not classified
Tetradecanoic acid	(CAS No) 544-63-8	<= 3	Eye Irrit. 2A, H319
Lauric acid	(CAS No) 143-07-7	<= 1	Eye Dam. 1, H318 Aquatic Acute 2, H401 Aquatic Chronic 3, H412

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. Immediately call a POISON CENTER or doctor/physician.

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

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

Symptoms/Injuries: Causes serious eye damage.

Symptoms/Injuries After Inhalation: Not expected to present a significant inhalation hazard under anticipated conditions of normal use.

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

Symptoms/Injuries After Eye Contact: Stinging, tearing, redness, and swelling of eyes. Causes severe irritation which will progress to chemical burns.

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: Use extinguishing media appropriate for surrounding fire. Carbon dioxide, powder. Sand.

Unsuitable Extinguishing Media: Do not use water.

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: 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.

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: Absorb and/or contain spill with inert material, then place in suitable container.

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.

Palmitic Acid 95% FGK

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling

Additional Hazards When Processed: Practice good housekeeping - spillage can be slippery on smooth surface either wet or dry.

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. Do not eat, drink or smoke when using this product.

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.

Incompatible Products: Strong oxidizers.

Storage Temperature: 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) Hexadecanoic acid

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 : Ensure all national/local regulations are observed.

Personal Protective Equipment : Safety glasses. Gloves.



Hand Protection : Rubber gloves.

Eye Protection : Chemical goggles or safety glasses.

Respiratory Protection : If exposure limits are exceeded or irritation is experienced, a 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

Physical State	: Solid
Appearance	: White.Waxy flakes
Odor	: Light.
Odor Threshold	: No data available
pH	: Not applicable
Relative Evaporation Rate (butylacetate=1)	: No data available
Melting Point	: 58 - 63 °C (136.4 - 145.4 °F)
Freezing Point	: No data available
Boiling Point	: > 300 °C (572.00 °F)
Flash Point	: ~ 200 °C (Cleveland Open Cup) (392.00 °F)
Auto-ignition Temperature	: > 250 °C (482.00 °F)
Decomposition Temperature	: No data available
Flammability (solid, gas)	: Not applicable
Vapor Pressure	: < 1
Relative Vapor Density at 20 °C	: No data available
Relative Density	: No data available
Specific Gravity	: ≈ 0.8527 g/cm ³ @ 20°C

Palmitic Acid 95% FGK

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Solubility	: Water: Insoluble @ 20°C Ethanol: Soluble Ether: Soluble Organic solvent: Soluble
Partition Coefficient: N-Octanol/Water	: Not available
Viscosity	: Not available
Viscosity, Dynamic	: ~ 13.56 mPa.s @ 70°C
Explosive Properties	: No data available
Oxidizing Properties	: No data available
Explosive Limits	: 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: Stable under normal temperature and pressure.
10.3 Possibility of Hazardous Reactions: Hazardous polymerization will not occur.
10.4 Conditions to Avoid: Avoid ignition sources. 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

Palmitic Acid 95% FGK (57-10-3; 57-11-4; 143-07-7; 544-63-9)	
Hexadecanoic acid (57-10-3)	
LD50 Dermal Rabbit	> 2000 mg/kg
ATE (Vapors)	0.162 mg/l/4h
Stearic acid (57-11-4)	
LD50 Oral Rat	> 5000 mg/kg
LD50 Dermal Rat	> 2000 mg/kg
Tetradecanoic acid (544-63-8)	
LD50 Oral Rat	> 10 g/kg

Skin Corrosion/Irritation: Not classified

pH: Not applicable

Serious Eye Damage/Irritation: Causes serious eye irritation.

pH: Not applicable

Respiratory or Skin Sensitization: Not classified

Germ Cell Mutagenicity: Not classified

Carcinogenicity: Not classified

Palmitic Acid 95% FGK (57-10-3; 57-11-4; 143-07-7; 544-63-9)

Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Single Exposure): Not classified

Palmitic Acid 95% FGK (57-10-3; 57-11-4; 143-07-7; 544-63-9)

Specific Target Organ Toxicity (Repeated Exposure): Not classified

Aspiration Hazard: Not classified

Symptoms/Injuries After Inhalation: Not expected to present a significant inhalation hazard under anticipated conditions of normal use.

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

Symptoms/Injuries After Eye Contact: Stinging, tearing, redness, and swelling of eyes. Causes severe irritation which will progress to chemical burns.

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

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Palmitic Acid 95% FGK

Safety Data Sheet

According to Federal Register/ Vol. 77, No. 58/ Monday, March 26, 2012/ Rules and Regulations

Hexadecanoic acid (57-10-3)	
LC50 Fish 1	150 mg/l (Exposure time: 96 h - Species: Oryzias latipes)
Tetradecanoic acid (544-63-8)	
LC50 Fish 1	118 mg/l (Exposure time: 96 h - Species: Oryzias latipes [static])

12.2. Persistence and Degradability

Palmitic Acid 95% FGK (57-10-3; 57-11-4; 143-07-7; 544-63-9)	
Persistence and Degradability	Readily biodegradable in water.

12.3. Bioaccumulative Potential

Palmitic Acid 95% FGK (57-10-3; 57-11-4; 143-07-7; 544-63-9)	
Bioaccumulative Potential	Not established.
Tetradecanoic acid (544-63-8)	
Log Pow	5.9

12.4. Mobility in Soil

Hexadecanoic acid (57-10-3)	
Log Koc	13.23
Stearic acid (57-11-4)	
Log Koc	51.05

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

Hexadecanoic acid (57-10-3)	
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	
Lauric acid (143-07-7)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
EPA TSCA Regulatory Flag	Y2 - Y2 - indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.
Tetradecanoic acid (544-63-8)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	

15.2 US State Regulations

Palmitic Acid 95% FGK(57-10-3; 57-11-4; 143-07-7; 544-63-9)	
State or local regulations	The product and/or its components does not appear on any state Right to Know lists.

Palmitic Acid 95% FGK

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Hexadecanoic acid (57-10-3)
U.S. - Texas - Effects Screening Levels - Long Term
U.S. - Texas - Effects Screening Levels - Short Term
Stearic acid (57-11-4)
U.S. - Texas - Effects Screening Levels - Long Term
U.S. - Texas - Effects Screening Levels - Short Term
Lauric acid (143-07-7)
U.S. - Texas - Effects Screening Levels - Long Term
U.S. - Texas - Effects Screening Levels - Short Term
Tetradecanoic acid (544-63-8)
U.S. - Texas - Effects Screening Levels - Long Term
U.S. - Texas - Effects Screening Levels - Short Term

SECTION 16: OTHER INFORMATION

Revision Date	: 05/22/2015
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:

Aquatic Acute 2	Hazardous to the aquatic environment - Acute Hazard Category 2
Aquatic Chronic 3	Hazardous to the aquatic environment - Chronic Hazard Category 3
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
H318	Causes serious eye damage
H319	Causes serious eye irritation
H401	Toxic to aquatic life
H412	Harmful to aquatic life with long lasting effects

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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