



# SILVER FERN CHEMICAL, INC.

## Safety Data Sheet Calcium Stearate

### SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

#### 1.1 Product identifier

**Product Name:** Calcium Stearate

**Synonym(s):** Fatty acids, hydrogenated, calcium salts; Calcium distearate; Calcium octadecanoate; Stearic acid, calcium salts

**REACH Registration Number:** No data available at this time.

#### 1.2 Relevant identified uses of the substance or mixture and uses advised against

**General use:** Industrial applications and laboratory use

**Uses advised against:** None known

#### 1.3 Details of the supplier and of the safety data sheet

**Manufacturer/Distributor**

Silver Fern Chemical, Inc.  
2226 Queen Anne Avenue North  
Suite C  
Seattle, WA 98109 USA  
1-866-282-3384

Website - [www.silverfernchemical.com](http://www.silverfernchemical.com); email address - [info@silverfernchemical.com](mailto:info@silverfernchemical.com)

#### 1.4 Emergency telephone number: INFO-TRAC +1-800-535-5053; Outside USA & Canada +1-352-323-3500

### SECTION 2 - HAZARDS IDENTIFICATION

#### 2.1 Classification of substance or mixture

**Product definition:** Substance

**Classification in accordance with 29 CFR 1910 (OSHA HCS) and Regulation EC No. 1272/2008**

Not a dangerous substance according to OSHA or to European Union Legislation

#### 2.2 Label Elements

Not classified as dangerous according to GHS

#### 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

May form combustible dust concentrations in air

### SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.1 Substances

% by Weight	Ingredient	CAS Number	EC Number	Index Number	GHS Classification
>96.0	Fatty Acids, Hydrogenated, Calcium Salts	1592-23-0/ 85215-71-4	209-151-9/ 292-967-2	-----	-----
<1.0	Palmitic/Stearic Acid Mixture	67701-03-5	266-928-5	-----	-----

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence, require reporting in this section.

#### 3.2 Mixtures

Not applicable

### SECTION 4 - FIRST AID MEASURES

#### 4.1 Description of first aid measures

**Inhalation:** If exposure to product dust causes respiratory irritation or distress, move the exposed person to fresh air immediately. If breathing is difficult or irregular, administer oxygen; if respiratory arrest occurs, start artificial respiration by trained personnel. Loosen tight fitting clothing such as a collar, tie, belt or waistband. If symptoms persist, seek medical attention.

**Eyes:** Immediately flush eyes with large amounts of water for 15 minutes, occasionally lifting the upper and lower lids. Remove contact lenses, if present and easy to do, after the first 2 minutes and continue rinsing. If irritation persists seek medical attention, preferably from an ophthalmologist.

**Skin:** Flush skin with water while removing contaminated clothing. Wash affected area with soap and water followed by thorough rinsing. Wash contaminated clothing and shoes thoroughly before reuse. If irritation persists, seek medical attention.

**Effective Date:** 16 June 2017

**Supersedes:** 17 April 2015

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**Ingestion:** Rinse mouth thoroughly with water if the victim is conscious. Remove dentures, if present. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious or convulsing person. Do not leave the victim unattended. Obtain medical attention.

#### 4.2 Most important symptoms and effects, both acute and delayed

##### Potential health symptoms and effects

**Eyes:** May cause eye irritation with redness, swelling, pain and tearing. May cause chemical conjunctivitis. May cause mechanical irritation.

**Skin:** May cause skin irritation with localized redness and itching.

**Inhalation:** May cause irritation of the respiratory tract. Inhalation of a nuisance dust may cause coughing, sneezing and nasal irritation.

**Ingestion:** May cause digestive upset with nausea, vomiting and diarrhea.

**Chronic:** No data available

#### 4.3 Indication of any immediate medical attention and special treatment needed

**Advice to Doctor and Hospital Personnel:** Treat symptomatically and supportively.

### SECTION 5 - FIRE FIGHTING MEASURES

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#### 5.1 Extinguishable media

**Suitable methods of extinction:** Use extinguishing media suitable for surrounding material.

**Unsuitable methods of extinction:** None known

#### 5.2 Special hazards arising from the substance or mixture

Closed containers may explode due to the buildup of pressure when exposed to extreme heat. During emergency conditions overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent or may be delayed. Obtain medical attention.

**Explosion hazards:** May form combustible dust concentrations in air.

#### 5.3 Advice for firefighters

Full protective equipment including self-contained breathing apparatus should be used. Water may be used to cool closed containers to prevent pressure buildup and possible autoignition or explosion when exposed to extreme heat. If possible, water contaminated by this material should be contained from being discharged to any waterway, sewer or drain to prevent environmental contamination.

### SECTION 6 - ACCIDENTAL RELEASE MEASURES

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#### 6.1 Personal precautions, protective equipment and emergency procedures

Evacuate non-essential personnel. Wear appropriate protective clothing designated in Section 8.2. Do not inhale dust. Remove all sources of ignition. No smoking. Ventilate the area. Clean up spills immediately.

#### 6.2 Environmental precautions

Avoid dispersal of spilled material or runoff and prevent contact with soil and entry into drains, sewers or waterways.

#### 6.3 Methods and materials for containment and cleaning up

Cover drains and contain spill. Avoid dust generation during cleanup. Collect material and place into an approved container for proper disposal. Observe possible material restrictions (Sections 7.2 and 10.5). Dispose of in accordance with federal, state and local regulations.

#### 6.4 Reference to other sections

See Section 13 for additional waste treatment information.

### SECTION 7 - HANDLING AND STORAGE

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#### 7.1 Precautions for safe handling

Wear all appropriate personal protective equipment specified in Section 8.2. Do not get in eyes or on skin or clothing. Do not breathe dust. No smoking. If normal use of material presents a respiratory hazard, use only adequate ventilation or wear an appropriate respirator. Wash contaminated clothing and shoes thoroughly before reuse.

##### Advice on protection against fire and explosion

Avoid dust generation and accumulation. May form combustible dust concentrations in air.

#### 7.2 Conditions for safe storage, including any incompatibilities

Store in dry, cool, well-ventilated areas away from incompatible materials (see Section 10.5), food and drink. Transfer only to approved containers having correct labeling. Keep container tightly closed. Protect containers against physical damage. Containers that have been opened must be carefully resealed and kept upright to prevent spillage. Containers may be hazardous when empty as they contain product residues. Use appropriate containment to avoid environmental contamination. Ventilate closed areas. Do not take internally. Keep out of reach of children.

#### 7.3 Specific end uses

Apart from the uses mentioned in Section 1.2, no other specific uses are stipulated.

### SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

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#### 8.1 Control parameters

##### Occupational exposure limits

CAS Number	Ingredient	OSHA PEL	ACGIH TLV	NIOSH
1592-23-0/ 85215-71-4	Fatty acids, hydrogenated calcium salts	15 mg/m <sup>3</sup> , total dust; 5 mg/m <sup>3</sup> , respirable fraction	10 mg/m <sup>3</sup> (stearates)	10mg/m <sup>3</sup> , total dust; 5 mg/m <sup>3</sup> , respirable fraction



## 8.2 Exposure controls

**Engineering measures:** Technical measures and appropriate working operations should be given priority over the use of personal protective equipment. Use adequate ventilation. Local exhaust is preferable.

**Individual protection measures:** Wear protective clothing to prevent repeated or prolonged contact with product. Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of hazardous substances handled. The chemical resistance of the protective equipment should be enquired at the representative supplier.

**Hygiene measures:** Facilities storing or using this material should be equipped with an eyewash station and safety shower. Change contaminated clothing. Preventive skin protection is recommended. Wash hands thoroughly after use, before eating, drinking, smoking or using the lavatory.

**Eye/face protection:** Wear safety glasses with unperforated side shields or protective splash goggles during use.

**Hand Protection:** Wear gloves recommended by glove supplier for protection against materials in Section 3. Gloves should be impermeable to chemicals and oil. Breakthrough time of selected gloves must be greater than the intended use period.

**Skin protection:** Wear protective clothing. Wear protective boots if the situation requires.

**Respiratory Protection:** Always use an approved dust mask when dusts are generated. Where risk assessment shows air-purifying respirators are appropriate use a full-faced respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Follow OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149.

**Environmental exposure controls:** Do not empty into drains.

*PPE must not be considered a long-term solution to exposure control. PPE usage must be accompanied by employer programs to properly select, maintain, clean fit and use. Consult a competent industrial hygiene resource to determine hazard potential and/or the PPE manufacturers to ensure adequate protection.*



## SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

Appearance	Fine, white powder or granular solid
Odor	Mild, fatty
Odor Threshold	No data available
Molecular Weight	607 g/mol (Calcium Stearate)
Chemical Formula	C <sub>36</sub> H <sub>70</sub> CaO <sub>4</sub> (Calcium Stearate)
pH	No data available
Freezing/Melting Point, Range	148 - 160 °C (266 - 302 °F)
Initial Boiling Point	No data available
Evaporation Rate	Not applicable
Flammability (solid, gas)	Non-flammable, combustible dust
Flash Point	>177 °C (>350.6 °F) open cup
Autoignition Temperature	421 °C (790 °F)
Decomposition Temperature	No data available
Lower Explosive Limit (LEL)	20 g/m <sup>3</sup>
Upper Explosive Limit (UEL)	No data available
Vapor Pressure	No data available
Vapor Density	No data available
Specific Gravity	1.03 @ 20 °C
Viscosity	No data available
Solubility in Water	Insoluble
Partition Coefficient: n-octanol/water	No data available
Oxidizing Properties	Not applicable
Explosive Properties	No data available
Volatiles by Volume @ 21 °C	0%

### 9.2 Other data

May form combustible dust concentrations in air

## SECTION 10 - STABILITY AND REACTIVITY

### 10.1 Reactivity

May form combustible dust clouds in air.

### 10.2 Chemical stability

This product is stable under recommended storage conditions, handling and use.

### 10.3 Possibility of hazardous reactions

Hazardous polymerization does not occur.

### 10.4 Conditions to avoid

High temperatures, contact with incompatible materials. Avoid dust generation and accumulation.

### 10.5 Incompatible materials

Strong oxidizing agents, strong acids, strong bases and alkalis

### 10.6 Hazardous decomposition products

Thermal decomposition products include oxides of carbon, calcium oxide fumes.

## SECTION 11 - TOXICOLOGICAL INFORMATION

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### 11.1 Information on toxicological effects

#### Acute Oral Toxicity

LD<sub>50</sub>, rat: >10 g/kg

#### Acute inhalation toxicity

No data available

#### Acute dermal toxicity

LD<sub>50</sub>, rat: 2,630 mg/kg *literature (Calcium Stearate)*

#### Skin irritation/corrosion

May cause skin irritation. May cause mechanical irritation.

#### Eye irritation/corrosion

May cause eye irritation

#### Sensitization

No data available

#### Genotoxicity in vitro

No data available

#### Mutagenicity

No data available

#### Specific organ toxicity - single exposure

No data available

#### Specific organ toxicity - repeated exposure

No data available

#### Aspiration hazard

No data available

### 11.2 Further information

No component of this product present at levels greater than or equal to the 0.1% threshold (de minimis) is identified as a probable, possible, potential or confirmed carcinogen by ACGIH, IARC, NTP or OSHA. No data is available regarding the mutagenicity or teratogenicity of this product, nor is there any available data that indicates that it causes adverse developmental or fertility effects.

Handle in accordance with good industrial hygiene and safety practice.

## SECTION 12 - ECOLOGICAL INFORMATION

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### 12.1 Toxicity

No data available

### 12.2 Persistence and degradability

#### Acute and prolonged toxicity to fish:

LC<sub>50</sub> - *Lepomis macrochirus* (Bluegill sunfish), 96 h: 10,650 mg/l *IUCLID*

#### Toxicity to aquatic invertebrates:

EC<sub>50</sub> - *Daphnia magna* (Water flea), 48 h: 144 mg/l *IUCLID*

#### Toxicity to aquatic plants:

IC<sub>50</sub> - Algae, 120 h: 130 mg/l *IUCLID*

### 12.3 Bioaccumulation potential

This material does not bioaccumulate.

### 12.4 Mobility in soil

No data available

### 12.5 Results of PBT and vPvB assessment

No data available

### 12.6 Other adverse effects

#### Additional ecological information

Do not allow material to run into surface waters, wastewater or soil.

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

## SECTION 13 - DISPOSAL CONSIDERATIONS

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### 13.1 Waste treatment methods

**Methods of disposal:** The generation of waste should be avoided or minimized whenever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

**RCRA P-Series:** No listing

**RCRA U-Series:** No listing

## SECTION 14 - TRANSPORT INFORMATION

**Note:** Transportation information provided is for reference only. Customer is urged to consult 49 CFR 100 - 177, IMDG, IATA, EC, United Nations TDG and WHMIS (Canada) TDG information manuals for detailed regulations and exceptions covering specific container sizes, packaging materials and methods of shipping.

**NOT REGULATED FOR TRANSPORT**

## SECTION 15 - REGULATORY INFORMATION

### 15.1 Safety, health and environmental regulations/legislation specific for substance or mixture

#### U. S. Federal Regulations

**OSHA Hazard Communication Standard:** This material is not classified as highly hazardous in accordance with OSHA 29 CFR 1910.1200.

**OSHA Process Safety Management Standard:** Chemicals in this product are not regulated under OSHA PSM Standard 29 CFR 1910.119.

**EPA Risk Management Planning Standard:** Chemicals in this product are not regulated under EPA RMP Standard (RMP) 40 CFR Part 68.

**EPA Federal Insecticide, Fungicide and Rodenticide Act:** Calcium Stearate (CAS #1592-23-0) is a registered Pesticide under the FIFRA, 40 CFR Part150.

**Toxic Substance Control Act (TSCA) Inventory:** This material is listed on the TSCA Inventory. It is not subject to TSCA 12(b) Export Notification.

**Drug Enforcement Administration (DEA) List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.4(f)(2) and Chemical Code Number**  
No listing

**Drug Enforcement Administration (DEA) Lists 1 & 2, Exempt Chemical Mixtures (21 CFR 1310.12(c)) and Code Number**  
No listing

**Department of Homeland Security (DHS) Chemical Facility Anti-Terrorism Standards (CFATS) Chemicals**  
No listing

#### **Superfund Amendments and Reauthorization Act (SARA)**

**SARA 313 Information:** None of the chemicals in this product are subject to reporting requirements of Section 313 of the Emergency Planning and Community Right-to Know Act of 1986.

**SARA Section 311/312 Hazard Categories:** None known

**SARA 302/304 Extremely Hazardous Substance:** None of the chemicals in this product are subject to reporting requirements of these sections of Title III of SARA.

**SARA 302/304 Emergency Planning & Notification:** None of the chemicals in this product are subject to reporting requirements of these sections of Title III of SARA.

**Comprehensive Response Compensation and Liability Act (CERCLA):** This product contains no CERCLA reportable substances.

#### **Clean Air Act (CAA)**

This product does not contain any substances that listed as Hazardous Air Pollutants (HAPs) designated in CAA Section 112 (b).

This product does not contain any Class 1 Ozone depletors.

This product does not contain any Class 2 Ozone depletors.

#### **Clean Water Act (CWA)**

This product does not contain any substances that listed as Hazardous Air Pollutants (HAPs) designated in CAA Section 112 (b).

None of the chemicals in this product are listed as Priority Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

#### U.S. State Regulations

##### **California Prop 65, Safe Drinking Water and Toxic Enforcement Act of 1986**

This product contains no chemical(s) known to the State of California to cause cancer, birth defects or other reproductive harm.

##### **Other U.S. State Inventories**

None of the chemicals in this product are listed on any State Hazardous Substance Inventories, Right-to-Know lists and/or Air Quality/Air Pollutants lists.

#### Canada

**WHMIS Hazard Symbol and Classification:** No data available

**Canadian National Pollutant Release Inventory (NPRI):** None of the substances in this product are listed on the NPRI.

#### European Economic Community

**WGK, Germany (Water danger/protection):** nwg (non-hazardous to waters)

#### Global Chemical Inventory Lists

Country	Inventory Name	Inventory Listing*
Canada:	Domestic Substance List (DSL)	Yes
Canada:	Non-Domestic Substance List (NDSL)	No
Europe:	Inventory of New and Existing Chemicals (EINECS)	Yes
United States:	Toxic Substance Control Act (TSCA)	Yes
Australia:	Australian Inventory of Chemical Substances (AICS)	Yes

\*Yes - All components of this product are in compliance with the inventory requirements administered by the governing country.

No - One or more components of this product are not on the inventory or are exempt from listing.

## Global Chemical Inventory Lists (continued)

Country	Inventory Name	Inventory Listing*
<b>New Zealand:</b>	New Zealand Inventory of Chemicals (NZIoC)	Yes
<b>China:</b>	Inventory of Existing Chemical Substances in China (IECSC)	Yes
<b>Japan:</b>	Inventory of Existing and New Chemical Substances (ENCS)	Yes
<b>Korea:</b>	Existing Chemicals List (ECL)	Yes
<b>Philippines:</b>	Philippines Inventory of Chemicals and Chemical Substances (PICCS)	Yes

\*Yes - All components of this product are in compliance with the inventory requirements administered by the governing country.  
No - One or more components of this product are not on the inventory or are exempt from listing.

### 15.2 Chemical safety assessment

For this product a chemical safety assessment was not carried out.

## SECTION 16 - OTHER INFORMATION

### Hazardous Material Information System (HMIS)

Health	0
Flammability	0
Physical Hazard	0
Personal Protection	B

#### HMIS Hazard Rating Legend

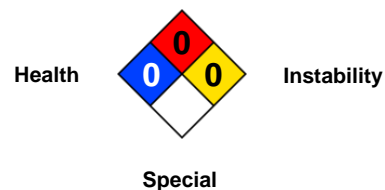
0 = Minimal 1 = Slight 2 = Moderate 3 = Serious  
4 = Severe \* = Chronic Health Hazard

#### NFPA Hazard Rating Legend

0 = Insignificant 1 = Slight 2 = Moderate  
3 = High 4 = Extreme

### National Fire Protection Association (NFPA)

#### Flammability



### Abbreviation Key

<b>ACGIH</b>	American Conference of Governmental Industrial Hygienists
<b>ADR</b>	Accord Dangereux Routier (European regulations concerning the international transport of dangerous goods by road)
<b>CAS</b>	Chemical Abstract Services
<b>CFR</b>	Code of Federal Regulations
<b>DOT</b>	Department of Transportation
<b>EMS Guide</b>	Emergency Response Procedures for Ships Carrying Dangerous Goods
<b>EPA</b>	Environmental Protection Agency
<b>ERG</b>	Emergency Response Guide Book
<b>FDA</b>	Food and Drug Administration
<b>GHS</b>	Globally Harmonized System of Classification and Labelling of Chemicals (GHS)
<b>HCS</b>	Hazard Communication Standard
<b>IARC</b>	International Agency for Research on Cancer
<b>IATA</b>	International Air Transport Association
<b>ICAO</b>	International Civil Aviation Organization
<b>IDLH</b>	Immediately Dangerous to Life and Health
<b>IMDG</b>	International Maritime Dangerous Goods
<b>IMO</b>	International Maritime Organization
<b>mppcf</b>	Millions of Particles Per Cubic Foot
<b>NA</b>	North America
<b>NAERG</b>	North American Emergency Response Guide Book
<b>NIOSH</b>	National Institute for Occupational Safety
<b>NTP</b>	National Toxicology Program
<b>OSHA</b>	Occupational Safety and Health Administration
<b>PBT</b>	Persistent, Bioaccumulating and Toxic
<b>PEL</b>	Permissible exposure limit
<b>PMCC</b>	Pensky-Martens Closed Cup
<b>ppm</b>	Parts Per Million
<b>RCRA</b>	Resource Conservation and Recovery Act
<b>RID</b>	Dangerous Goods by Rail
<b>RQ</b>	Reportable Quantity
<b>TCC/Tag</b>	Tagliabue Closed Cup
<b>TLV</b>	Threshold Limit Value
<b>TSCA</b>	Toxic Substance Control Act
<b>TWA</b>	Time-weighted Average
<b>UN</b>	United Nations
<b>VOC</b>	Volatile Organic Compounds
<b>vPvB</b>	Very Persistent and Very Bioaccumulating
<b>WHMIS</b>	Workplace Hazardous Materials Information System

## DISCLAIMER OF RESPONSIBILITY

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Revision Date: 08 June 2017

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