



SILVER FERN CHEMICAL

Material Safety Data Sheet

Soybean Fatty Acid SFA210

SECTION 1: IDENTIFICATION

Product Name: Soybean Fatty Acid SFA210

CAS Number: 67701-08-0

Chemical Name: Fatty Acids C16-C18 and C18 unsaturated

Company

Silver Fern Chemical, Inc.
2226 Queen Anne Avenue North
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Seattle WA 98109, USA

Business Contact

Customer Service: 206-282-3376
info@silverfernchemical.com

24 Hour Emergency Contact

Infotrac 800-535-5053
Outside USA & Canada 352-323-3500

SECTION 2: HAZARD IDENTIFICATION

- **European Hazard Classification:** This product is not classified as dangerous according to Directive 67/548/EEC.
- **Emergency Overview:** North America Non- Hazardous
- **Potential Health Effects:**
 - Eye:** Accidental exposure to the eyes will cause only a mild but transient irritation.
 - Skin:** Mild, primary skin irritation with prolonged or repeated contact. Heated product may cause thermal burns if contacted.
 - Inhalation:** Not applicable at ambient temperature.
 - Ingestion:** May cause irritation of gastrointestinal tract.

If product is heated, vaporization can occur. Eye, skin, and upper respiratory irritation may occur.

- Physical/Chemical Hazards: None identified.
- Environmental Hazards: None identified.

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

Substance/Preparation (mixture): Substance

Name	CAS No.	Wt/Wt %	EC No.	EC Symbols	EC R-phrases
Fatty Acids, C16-18 and C18 unsaturated	68308-53-2	100	2696570	Not applicable	Not applicable

Occupational exposure limits, if applicable, are listed in Section 8.

LC/LD50 information is listed in Section 11.

Full text of R phrase(s) are listed in Section 16.

SECTION 4: FIRST AID MEASURES

- Eye: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.
- Skin: Wash skin with soap and water upon contact. Remove contaminated clothing. If irritation develops, get medical attention. Wash clothing before reuse.
- Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.
- Ingestion: If swallowed, do not induce vomiting. Get medical attention. Never give anything by mouth to an unconscious person.

SECTION 5: FIRE FIGHTING MEASURES

- Extinguishing Media: SMALL FIRES: Use CO2 or dry chemical.
LARGE FIRES: Use foam.
- Unsuitable extinguishing media: Do not use water as an extinguishing media.
- Flash Point and method: 408° F (208.9° C) PMCC
- Explosive limits in air: Upper: Not available
Lower: Not available
- Auto-ignition temperature: Not available
- Sensitivity to mechanical impact/static discharge: Not available.
- Special Protective Equipment: Wear self-contained breathing apparatus and full protective clothing.
- Other Fire Fighting Considerations: Cool containers with flooding quantities of water until well after fire is out.

- Exposure hazards:

Does not decompose up to 400° F (204° C). Thermal decomposition or burning may produce carbon monoxide and/or carbon dioxide.

SECTION 6: ACCIDENTAL RELEASE MEASURES

- Personal Precautions: An appropriate NIOSH/MSHA approved respirator should be used if a mist, vapor or dust is generated. Wear suitable gloves and eye/face protection. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
- Environmental Precautions: Minimize contamination of drains, surface and ground waters.
- Procedures for Spill/Leak Clean-up: Neutralization not required. Contain spill. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers for disposal. Dispose as any grease or oily material in compliance with Federal, State, and/or Local requirements.

Refer to Section 8 for additional personal protection information.
Refer to Section 13 for disposal considerations.

SECTION 7: HANDLING AND STORAGE

- Handling: Handle in accordance with good hygiene and safety procedures. Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling. Since empty containers contain product residue and can be dangerous, follow all hazard warnings and precautions even after container is emptied. Keep away from sources of ignition.
- Storage: Keep away from possible contact with incompatible substances. Should be stored in resin-lined steel, aluminum, stainless steel, or reinforced fiberglass vessels. Do not store near possible sources of ignition.
- Specific use(s): Follow bulk handling and storage procedures as noted above.

Refer to Section 6 for clean-up of spillages.
Refer to Section 13 for disposal considerations.

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

- General Precautions: Good industrial hygiene should be followed. Avoid breathing (heated) vapors. Avoid eye and skin contact.
- Exposure Limit Values: Not established.
- Exposure Controls:

Engineering Controls:	Ventilation:	Local exhaust: preferred Mechanical: may be necessary if working at elevated temperatures or in enclosed areas.
Personal Protective Equipment:	Eye:	Goggles or face shield with goggles, dependent upon potential exposure.
	Skin:	Protective gloves: Rubber or plastic Dependent upon degree of potential exposure, additional

personal protective equipment may be required, such as chemical boots and full protective clothing.

Inhalation: None required for ambient temperature, although an appropriate NIOSH/MSHA approved air-purifying respirator should be used if a mist, vapor or dust is generated. A NIOSH/MSHA approved self-contained breathing apparatus or air-supplied respirator is recommended if the concentration exceeds the capacity of cartridge respirator. **WARNING:** Air purifying respirators do not protect workers in oxygen-deficient atmospheres.

Other Controls: Boots, eye wash fountain, safety shower, apron, protective clothing.

- Environmental Exposure Controls: Contact Twin Rivers Technologies for specific Community information.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

- General Information:

Physical State at 72° F (22° C):	Liquid to semi-solid
Appearance:	Water white to yellow
Odor:	Musty, fatty
Odor Threshold:	Not available

- Important health, safety and environmental information:

pH:	Not available
Boiling point/Boiling range:	Over 500° F (260° C) @ 760 mm Hg (101.3kPa)
Flash Point & Method:	408° F (208.9° C) PMCC
Flammability (solid, gas):	Not available
Explosive properties:	Not available
Oxidising properties:	Not available
Vapor pressure:	@ 72° F (22° C) < 1 mm Hg
Relative density:	0.85 - 0.90 @ 49/25° C
Freezing point:	Not available
Solubility: Water solubility:	Negligible @ 72° F (22° C)
Fat solubility (solvent-oil to be specified):	Not available
Partition coefficient: n-octanol/water:	Not available
Viscosity:	Not available
Vapor density:	Not available
Evaporation Rate (nBuOAc=1):	Not available
Explosive Limits:	Not available
Auto ignition temperature:	Not available
Coefficient of water/oil distribution:	Not available

SECTION 10: STABILITY AND REACTIVITY

- Stability: Stable under normal operational procedures.
- Conditions to Avoid: None identified.
- Materials to Avoid: Avoid strong oxidizing agents.
- Hazardous Decomposition Products: Does not decompose up to 400° F (204° C). Thermal decomposition or burning may produce carbon monoxide and/or carbon dioxide.

- Hazardous Polymerization: Will not occur.

SECTION 11: TOXICOLOGICAL INFORMATION

Acute Oral Toxicity / Rats

The acute oral LD50 for male albino rats was greater than 24 g/kg of body weight.

Skin Safety

The application of undiluted fatty acid produced mild irritation to rabbit's skin after a 24-hr. exposure. The primary irritation index was 1.6 out of a possible score of 8.

Eye Safety

The administration of undiluted test material to the eyes of rabbits produced mild, transient eye irritation. No corneal or iris involvement was observed.

SECTION 12: ECOLOGICAL INFORMATION

	<u>OLEIC ACID</u>	<u>LINOLEIC</u>
96 HOUR LC50, Bluegills	66.6 mg/L	No available data
96 HOUR LC50, Fathead minnows	205 mg/L	No available data

SECTION 13: DISPOSAL CONSIDERATIONS

DISPOSAL IS TO BE PERFORMED IN COMPLIANCE WITH ALL FEDERAL, STATE/PROVINCIAL AND LOCAL REGULATIONS. Do not dispose of via sinks, drains or into the immediate environment.

SECTION 14: TRANSPORT INFORMATION

U.S. DOT: Not regulated for transport
Not classified in RID/ADR - ADNR - IMDG - ICAO/IATA – DGR

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

SECTION 15: REGULATORY INFORMATION

INVENTORY STATUS:

Listed on TSCA (USA), AICS (Australia), DSL (Canada), EINECS (EU), IECSC (China), KECI (Korea), New Zealand (Composite List of Single Component Substances to be considered for Transfer (April 2003)), PICCS (Philippines)

WGK water endangering class 1, slightly water endangering

Canada

HAZARDOUS INGREDIENTS – WHMIS (Canadian Workplace Hazardous Materials Information System)

This product when tested as a whole is not a controlled substance within the meaning of the Hazardous Products Act. This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

SECTION 16: OTHER INFORMATION

EUROPE

This product safety data sheet was prepared in compliance with Directive 2001/58/EC.

References: "Safety Studies on a Series of Fatty Acids" by G.B. Briggs, R.L. Doyle and J.A. Young; Amer. Ind. Assoc. J. 251-253 (April 1976).
*V. R. Mattson, et al, "Acute toxicity of selected organic compounds to fathead minnows," EPA-600/3-76-097, Oct. 1976.

The following sections contain revisions or new statements: 1, 15.

The submission of the MSDS may be required by law, but this is not an assertion that the substance is hazardous when used in accordance with proper safety practices and normal handling procedures. Data supplied are for use only in connection with occupational safety and health.

DISCLAIMER OF RESPONSIBILITY

The information on this MSDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, expressed or implied, regarding its correctness. Some information presented and conclusions drawn herein are from sources other than direct test data on the substance itself. The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage, or expense arising out of or in any way connected with handling, storage, use, or disposal of this product. If the product is used as a component in another product, this MSDS information may not be applicable.

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