



# Silver Fern Chemical, Inc.

## Safety Data Sheet

### Soy Methyl Ester

Revision Date: 15-Feb-2019

Revision Number: 2

#### 1. Identification

**Product Name:**

Soy Methyl Esters

**Use of the Substance / Preparation:**

Industrial use

**Contact Distributor:**

Silver Fern Chemical, Inc.  
2226 Queen Anne Avenue North  
Seattle WA 98109, USA  
Phone: 1-866-282-3384  
Info@silverfernchemical.com

**Emergency response telephone number:**

24 Hour Emergency Contact  
Infotrac 1-800-535-5053 (USA & Canada)  
Outside USA & Canada 1-352-323-3500

#### 2. Hazard(s) identification

##### Emergency Overview

Spontaneous combustion (fire) may result from oil soaked materials such as rags, steel wool, paper, and clothing. Place soaked materials in a sealed, metal container to prevent this.

**Appearance**

Light yellow

**Physical State**

Liquid

**Odor**

Mild (typical for vegetable compounds)

**This product is NOT classified as hazardous according to the criteria contained in the Hazard Communication Standard 29 CFR 1910.1200 (known as HCS 2012) or the Hazardous Products Regulations SOR/2015-17 (known as WHMIS 2015).**

#### 3. Composition/information on ingredients

**Chemical nature of the preparation** Substance (UVCB)

**CAS-No** equivalent CAS numbers 67784-80-9 & 68919-53-9 are both applicable to this product (as noted below).

**The following component(s) in this product are considered hazardous under applicable OSHA (USA), WHMIS (Canada), and/or NOM-002-SCT-2003 (Mexico) regulations (or require disclosure as an air contaminant)**

Chemical Name	CAS-No	Weight %	North American Substance Hazard Class
Methyl alcohol	67-56-1	<= 0.2	Fam. Liq. 2. Acute Tox. 2. (oral) (dermal) (inhalation) STOT SE, Cat. 1. Affected organs: Optic nerve (nervus opticus), central nervous system. 29 CFR 1910.1000 Air Contaminant. See section 8 for OELs.

##### Non-hazardous Components

Chemical Name	CAS-No	Weight %	North American Substance Hazard Class
Soybean Oil, Me Ester	67784-80-9	98-100	None known
Fatty Acids, soya, methyl esters	68919-53-9	98-100	None known

Components which are not considered "health hazards" under paragraph (d) of 29 CFR §1910.1200 or SOR/2015-17 (WHMIS 2015) are not required to disclose the exact percentage of inclusion.

Authored to comply with 29 CFR 1910.1200, (HCS 2012) and SOR/2015-17, Schedule 1 (WHMIS 2015) as amended to conform to the United Nations' Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

#### 4. First-aid measures

**Description of first aid measures**

**Eye Contact** Flush eyes with plenty of water for 15 minutes.

**Skin Contact** Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes.

**Inhalation** Move to fresh air in case of accidental inhalation of vapours or decomposition products. If symptoms persist, call a physician.

**Ingestion** Drink 1 or 2 glasses of water. Consult a physician if necessary.

**General Advice** When symptoms persist or in all cases of doubt seek medical advice.

**Most important symptoms and affects, both acute and delayed**

**Eyes** No eye irritancy to be expected.

**Skin** Contact with product at elevated temperatures can result in thermal burns.

**Inhalation** Avoid breathing vapors or mists. Inhalation of vapors in high concentration may cause irritation of respiratory system.

**Ingestion** May be harmful if swallowed.

**Main Symptoms** Nausea. Dizziness. Irritating to respiratory system.

**Indication of any immediate medical attention and special treatment needed**

**Notes to Physician** Special forms of treatment and immediate medical attention are not specified. Treat Symptomatically.

#### 5. Fire-fighting measures

**Flammable Properties**

Material may pose fire hazard because it is dispersed (or spread) by water.

**Extinguishing media**

**Suitable Extinguishing Media** Dry chemical. Carbon dioxide (CO<sub>2</sub>) Alcohol-resistant foam. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable Extinguishing Media** Do not use a solid water stream as it may scatter and spread fire.

**Special hazards arising from the substance or mixture**

**Hazardous Combustion Products** Thermal decomposition can lead to release of irritating gases and vapors, Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>).

**Specific Hazards Arising from the Chemical** Risk of ignition. Cool closed containers exposed to fire with water spray. Rags and other materials containing this product may heat and spontaneously ignite, if exposed to air. Store wiping rags and similar materials in metal cans with tightly fitting lids.

**Sensitivity to mechanical impact** No information available.

**Sensitivity to static discharge** No information available.

**Advice for fire-fighters**

**Protective Equipment and Precautions for Firefighters** As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**NFPA**

Health 0  
Flammability 1

Stability and Reactivity 0  
Physical hazard None known



## 6. Accidental release measures

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

Remove all sources of ignition. Material can create slippery conditions.

### Environmental Precautions

Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system. Store contaminated materials in tightly closed containers until disposal.

### Methods and Materials for Containment and Cleaning Up

Soak up with inert absorbent material. Pick up and transfer to properly labelled containers. Large spills should be collected mechanically (remove by pumping) for disposal. Clean contaminated surface thoroughly.

## 7. Handling and storage

### Handling

Ensure adequate ventilation.

### Storage

Keep in a dry, cool and well-ventilated place. Keep away from direct sunlight. Keep away from open flames, hot surfaces and sources of ignition. Keep at temperatures between 50-120°F/ 10-49°C.

## 8. Exposure controls/Personal protection

### Exposure Limits

When in the form of an airborne mist containing vegetable oil, observe the OSHA and ACGIH established limits for "vegetable oil mist". OSHA PEL: [15 mg/m<sup>3</sup> (mist) 8-hr TWA], [5 mg/m<sup>3</sup> mist (respirable) 8-hr TWA]. ACGIH TLV: [10 mg/m<sup>3</sup> (mist) 8-hr TWA].

Chemical Name	ACGIH TLV	OSHA PEL	Mexico	NIOSH
Methyl alcohol	STEL: 250 ppm TWA: 200 ppm	TWA: 200 ppm TWA: 260 mg/m <sup>3</sup>	TWA: 200 ppm (LMPE-PPT) TWA: 260 mg/m <sup>3</sup> (LMPE-PPT) STEL: 250 ppm (LMPE-CT) STEL: 310 mg/m <sup>3</sup> (LMPE-CT) Skin	IDLH: 6000 ppm Skin STEL: 250 ppm STEL: 325 mg/m <sup>3</sup> TWA: 200 ppm TWA: 260 mg/m <sup>3</sup>

### Biological Limit Values

BLVs provide information useful for evaluating a worker's response and measuring overall exposure and can be regarded as reference guides for assessing the results of biological monitoring data. BLVs depend on many factors, such as metabolism and pharmacokinetics of the chemical and body build, workload, and lifestyle of the worker. BEI notations are meant to aid in assessing biological monitoring results. BEIs provide an index of an individual's uptake of a chemical and generally indicate a concentration below which nearly all workers should not experience adverse health effects. When one or more BEI is recommended for a substance, biological monitoring should be instituted to evaluate total exposure from all sources, including dermal, ingestion, or non-occupational.

Component	ACGIH - Biological Exposure Indices (BEI)
Methyl alcohol 67-56-1 ( ≤ 0.2 )	15 mg/L Medium: urine Time: end of shift Parameter: Methanol (background, nonspecific)

**Appropriate Engineering Controls** Ensure adequate ventilation, especially in confined areas. Apply technical measures to comply with the occupational exposure limits. However it is the duty of the user to verify this and follow given exposure limits at the workplace.

**General Hygiene Considerations** Handle in accordance with good industrial hygiene and safety practice.

### Personal Protective Equipment

#### Eye/face Protection.

#### Skin and Body Protection

Safety glasses with side-shields, if needed. If splashes are likely to occur, wear goggles  
Impervious gloves. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used. Appropriate body protection should be selected based on activity and possible exposure.

#### Respiratory Protection

In case of mist, spray or aerosol exposure wear suitable personal respiratory protection. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.



## 9. Physical and chemical properties

<b>Appearance</b>	Light yellow
<b>Physical State</b>	Liquid
<b>Odor</b>	Mild (typical for vegetable compounds)
<b>Odor Threshold</b>	No information available
<b>pH</b>	No information available
<b>Flash Point</b>	> 93.0 °C / 199.4 °F
<b>Autoignition Temperature</b>	No information available
<b>Boiling point</b>	> 200 °C / 392 °F
<b>Melting/Freezing Point</b>	No information available
<b>Decomposition temperature</b>	No information available
<b>Oxidizing Properties</b>	Not oxidizing
<b>Water Solubility</b>	Insoluble
<b>Surface Tension</b>	Not relevant.
<b>Evaporation Rate</b>	< 1.0 [Butyl acetate = 1.0]
<b>Vapor Pressure</b>	Approx. < 2 mmHg
<b>Vapor Density</b>	>1 (Air = 1.0)
<b>Specific Gravity / Relative Density</b>	No information available
<b>Partition Coefficient (n-octanol/water)</b>	No information available

## 10. Stability and reactivity

**Stability** Stable under normal conditions.

**Possibility of Hazardous Reactions** None under normal processing.

**Conditions to Avoid** Keep away from open flames, hot surfaces and sources of ignition.

**Incompatible Materials** Strong oxidizing agents.

**Hazardous Decomposition Products** Thermal decomposition can lead to release of irritating gases and vapors. Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>).

## 11. Toxicological information

### Information on toxicological effects

<b>Acute toxicity</b>	Based on available data, the classification criteria are not met.
<b>Skin corrosion/irritation</b>	Based on available data, the classification criteria are not met.
<b>Serious eye damage/eye irritation</b>	Based on available data, the classification criteria are not met.
<b>Respiratory or skin sensitisation</b>	Based on available data, the classification criteria are not met.
<b>Germ cell mutagenicity</b>	Based on available data, negative to test/non-mutagenic.
<b>Carcinogenicity</b>	No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen.
<b>Reproductive toxicity</b>	The product, as a whole, is not considered to be a reproductive hazard according to the classification criteria of OSHA/GHS.
<b>STOT - single exposure</b>	No evidence of toxicity.
<b>STOT - repeated exposure</b>	No evidence of toxicity.
<b>Aspiration hazard</b>	Based on available data, the classification criteria are not met.

### Potential health effects

<b>Eyes</b>	No eye irritancy to be expected.
<b>Skin</b>	Contact with product at elevated temperatures can result in thermal burns.
<b>Inhalation</b>	Avoid breathing vapors or mists. Inhalation of vapors in high concentration may cause irritation of respiratory system.



**Ingestion** May be harmful if swallowed.  
**Main Symptoms** Nausea. Dizziness. Irritating to respiratory system.

**12. Ecological information**

**Ecotoxicity**

Contains no substances known to be hazardous to the environment. Contains no substances known to be not degradable in waste water treatment plants.

**Persistence/Degradability** No information available  
**Mobility** No information available  
**PBT and vPvB assessment** No information available.  
**Other adverse effects** Nothing specific known.

**13. Disposal considerations**

Whenever possible, as rules and regulations allow, please recycle or manage materials to minimize waste.

**Waste Disposal Methods** Dispose of in compliance with the laws and regulations pertaining to this product in your jurisdiction. Oil soaked materials may spontaneously combust and should be properly managed to avoid ignition and heat sources or oxygen rich environments. Collect and store soaked materials in closed, metal containers to help prevent combustion.

**14. Transport information**

**Domestic transport regulations (USA)**

DOT Not regulated

**Domestic transport regulations (Canada)**

TDG Not regulated

**Domestic transport regulations (Mexico)**

MEX Not regulated

**International transport regulations**

ICAO Not regulated

IATA Not regulated

IMDG/IMO Not regulated

**15. Regulatory information**

**International Inventories**

The components of this product are reported in the following inventories:

Chemical Name	TSCA	DSL	NDSL	ICL	EINECS	ELINCS	AICS
Soybean Oil, Me Ester	Yes	Yes	No	No	Yes Present	No	Yes
Fatty Acids, soya, methyl esters	Yes	Yes	No	No	Yes 273-606-8	No	No
Methyl alcohol	Yes	Yes	Yes	No	Yes 200-659-6	No	Yes

Chemical Name	ENCS ISHL	CHINA	PICCS	KECL	Taiwan	Turkey	NZIoC
Soybean Oil, Me Ester	Yes (2)-798	Yes	No	Yes (KE-31749)	Yes	No	Yes

Authored to comply with 29 CFR 1910.1200, (HCS 2012) and SOR/2015-17, Schedule 1 (WHMIS 2015) as amended to conform to the United Nations' Globally Harmonized System of Classification and Labeling of Chemicals (GHS).



Silver Fern Chemical, Inc.  
Safety Data Sheet  
Soy Methyl Ester

Revision Date: 15-Feb-2019

Fatty Acids, soya, methyl esters	Yes	Yes	Yes	Yes KE-15243	Yes	Yes 272-898-4	Yes
Methyl alcohol	Yes 2-201	Yes	Yes	Yes KE-23193	Yes	Yes 200-659-6	Yes

## USA

### Federal Regulations

#### Ozone Depleting Substances:

No Class I or Class II material is known to be used in the manufacture of, or contained in, this product.

#### SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product is not known to contain any chemicals which are subject to the reporting requirements of the Act or regulations contained in 40 CFR 372.

#### CERCLA/SARA 103-302

Sections 103-302 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product is not known to contain any chemicals which are expected to be subject to the reporting requirements of the Act or regulations contained in 40 CFR 103-302.

#### SARA 311/312 Hazardous Categorization

Refer to the OSHA hazard classification(s) provided in section 2 of this SDS.

#### Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 63)

This product is known to contain the following HAPs:

Chemical Name	CAS-No	Weight %	HAPS
Methyl alcohol	67-56-1	<= 0.2	Present

### State Regulations

#### California Proposition 65

This product is known to contain the following Proposition 65 chemicals:

Chemical Name	CAS-No	Weight %	Category
Methyl alcohol	67-56-1	<= 0.2	Developmental

#### State Right-to-Know

Component Information.

Chemical Name	Weight %	Massachusetts	Minnesota	New Jersey	Pennsylvania
Soybean Oil, Me Ester	98-100	No	No	No	No
Methyl alcohol	<= 0.2	Yes	Yes	Yes 1222	Yes Environmental hazard

## Canada

### (NPRI) Canadian National Pollutant Release Inventory

Component Information

Chemical Name	Weight %	NPRI
Methyl alcohol	<= 0.2	Part 1, Group A Substance; Part 5, Individual Substances; Part 4 Substance

## 16. Other information

Revision Date: 15-Feb-2019  
Revision Number: 2

Authored to comply with 29 CFR 1910.1200, (HCS 2012) and SOR/2015-17, Schedule 1 (WHMIS 2015) as amended to conform to the United Nations' Globally Harmonized System of Classification and Labeling of Chemicals (GHS).



**Silver Fern Chemical, Inc.**  
**Safety Data Sheet**  
**Soy Methyl Ester**

Revision Date: 15-Feb-2019

**Reason for revision:**

This data sheet contains changes from the previous version in section(s) 3. This version replaces all previous versions.

**Abbreviations and acronyms**

A1 - Known Human Carcinogen  
A2 - Suspected Human Carcinogen  
A3 - Animal Carcinogen  
A4 - Not classifiable as a human carcinogen  
ACGIH TLV - American Conference of Governmental Industrial Hygienists Threshold Limit Values  
CAS - Chemical Abstract Service  
Ceiling - Ceiling Limit Value: Concentrations that should never be exceeded at any given time (instantaneous)  
CHINA - Chinese Inventory of Existing Chemical Substances (China)  
CLP - Classification, Labelling and Packaging, Regulation (EC)1272/2008  
CSA - Chemical Safety Assessment  
CSR - Chemical Safety Report  
Delisted - Substances Delisted from Report on Carcinogens  
DNEL - Derived No Effect Level  
DOT - U.S. Department of Transportation  
DSL - Domestic Substance List (Canada)  
EC - European Commission  
EC No. - European Community number  
EC50 - Half maximal effective concentration  
EINECS - European Inventory of Existing Commercial Chemical Substances (EU)  
ELINCS - European List of Notified Chemical Substances (EU)  
ENCS - Existing and New Chemical Substances (Japan) / ISHL - Industrial Health and Safety Law (Japan)  
EPCRA - Emergency Planning and Community Right-to-Know Act of 1986 (USA)  
FOSFA - The Federation of Oils, Seeds and Fats Associations  
GHS - Globally Harmonized System of Classification and Labelling of Chemicals  
Group 1 - Carcinogenic to Humans  
Group 2A - Probably Carcinogenic to Humans  
Group 2B - Possibly Carcinogenic to Humans  
Group 3 - Not Classifiable  
IARC - International Agency for Research on Cancer  
IATA - International Air Transport Association Dangerous Goods Regulations  
IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk  
ICAO - International Civil Aviation Organisation  
ICL - In Commerce List (Canada)  
IDLH - Immediately Dangerous to Life or Health  
IMDG - International Maritime Dangerous Goods Code  
IMO - International Maritime Organization  
IUB - International Union of Biochemistry and Molecular Biology  
KECL - Korean Existing and Evaluated Chemical Substances (Korea)  
Known - Known Carcinogen  
LC50 - Lethal concentration that produces fatalities in 50% of a given test population  
LD50 - Median lethal dose of a given test population  
Marpol - International Convention for the Prevention of Pollution From Ships  
MEPC - Marine Environment Protection Committee  
MEX - NOM-002-SCT/2003 List of Hazardous Substances and Materials Most Commonly Transported  
MEXICO - Mexico Occupational Exposure Limits  
NDSL - Non Domestic Substances List (Canada)  
NFPA - National Fire Protection Association  
NIOSH - National Institute of Occupational Safety and Health  
NOAEL - No Observed Adverse Effect Level  
NTP - National Toxicology Program  
NZIoC - New Zealand Inventory of Chemicals (New Zealand)  
OECD - Organisation for Economic Co-operation and Development  
OSHA - Occupational Safety & Health Administration  
OSHA PEL - Occupational Safety and Health Administration Permissible Exposure Limits

Authored to comply with 29 CFR 1910.1200, (HCS 2012) and SOR/2015-17, Schedule 1 (WHMIS 2015) as amended to conform to the United Nations' Globally Harmonized System of Classification and Labeling of Chemicals (GHS).



**Silver Fern Chemical, Inc.**  
**Safety Data Sheet**  
**Soy Methyl Ester**

Revision Date: 15-Feb-2019

PICCS - Inventory of Chemicals and Chemical Substances (Philippines)  
PNEC - Predicted No-Effect Concentration  
Present - Carcinogen or potential carcinogen to be identified under OSHA's Hazard Communication Standard  
Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen  
SEN - Sensitizer notation. May reflect risk of dermal and/or inhalation sensitization (consult ACGIH documentation).  
Skin notation - Potential for cutaneous absorption  
STEL - Short Term Exposure Limit: Concentrations that should not be exceeded except for short periods of time ( usually 15-minutes)  
STOT - Specific Target Organ Toxicity  
STV - Short Term Value (same as STEL)  
TDG - Transportation of Dangerous Goods (Transport Canada)  
TSCA - Toxic Substances Control Act, Section 8(b) Inventory (USA)  
TWA - Time Weighted Average: Average concentration that should not be exceeded during a work day (usually 8-hours)  
Under Consideration - Under Consideration by the National Toxicology Program  
vPvB - Very Persistent and Very Bioaccumulative  
WHMIS - Workplace Hazardous Materials Information System

**The information on this SDS 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 SDS information may not be applicable**

End of sheet