

Safety Data Sheet

Revision Date: 17-Jan-2019

Revision Number: 2

1. Identification

Product Name:

Refined, Bleached and Deodorized Soybean Oil

Use of the Substance / Preparation: Food Ingredient, Animal Feed, Industrial use

Contact Manufacturer:

Archer Daniels Midland Company 4666 Faries Parkway

Decatur, IL 62526, USA Telephone Number: (+1) 217-424-5200 **Product Code:**

860700

Emergency response telephone number: Chemtrec 1-800-424-9300 (CCN 1635)

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. The product contains no substances which at their given concentration, are considered to be hazardous to health.

Appearance Light yellow **Physical State**

Liquid

Odor

Slight Vegetable oil

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). However, vegetable oil (in mist form) is known to be listed as an OSHA 29 CFR 1910.1000 Air Contaminant. Occupational exposure limits are subsequently provided in section 8 of this SDS.

3. Composition/information on ingredients

Chemical Family Description Oil Unknown, or Variable Composition, or of Biological Origin (UVCB)

Soybean Oil

Non-hazardous Components

TOTAL TRANSPORTED TOTAL PROPERTY OF THE PROPER								
Chemical Name	CAS-No Weight %		North American Substance Hazard Class					
Soybean oil	8001-22-7	99-100	None known					

4. First-aid measures

Description of first aid measures

Eye Contact Rinse thoroughly with plenty of water, also under the eyelids.

Skin Contact Wash off with warm water and soap.

Inhalation Move to fresh air.

Ingestion No special measures required. Health injuries are not known or expected under normal use.

General Advice No hazards which require special first aid measures. When symptoms persist or in all cases of doubt seek medical advice.

Most important symptoms and affects, both acute and delayed

Eyes Not expected to pose health issues for the eye.

Skin Prolonged or excessive contact with skin may result in mild irritation, however, significant health injuries are not expected under normal use.

Inhalation Health injuries are not known or expected under normal use. When in the form of an airborne mist, refer to section 8 of this sheet for exposure limits pertaining to "vegetable oil mist". Excessive inhalation of mist may result in respiratory irritation. **Ingestion** Health injuries are not known or expected under normal use. Over exposure may cause: Gastrointestinal disturbance.

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. Dry chemical powder. Carbon dioxide (CO₂) Foam. Sand. Fog. 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, Acrolein, Carbon

monoxide (CO), Carbon dioxide (CO2).

Specific Hazards Arising from the Risk of ignition. Rags and other materials containing this product may heat and Chemical spontaneously ignite, if exposed to air. Store wining rags and similar materials in a

spontaneously ignite, if exposed to air. Store wiping rags and similar materials in metal cans with tightly fitting lids. Cool closed containers exposed to fire with water spray.

Sensitivity to mechanical impact
Sensitivity to static discharge
No information available.
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

Avoid high pressure washing or generation of aerosols. Material can create slippery conditions.

Environmental Precautions

Prevent further leakage or spillage if safe to do so. Do not allow product to reach soil, sewage system or any water course.

Methods and Materials for Containment and Cleaning Up

Dam up. Soak up with inert absorbent material. Use dry spill kit material or sand, collect in appropriate containers. For disposal information see section 13. Clean contaminated surface thoroughly. Collect all soaked materials in suitable, closed containers as they may heat and spontaneously ignite, if exposed to air.

Other Information

Oil soaked materials may spontaneously combust.

7. Handling and storage

Handling

Ensure adequate ventilation. Do not use pressure to empty drums. Keep away from open flames, hot surfaces and sources of ignition.

Storage

Keep in a cool sheltered place. To maintain product quality, do not store in heat or direct sunlight.

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/m³ (mist) 8-hr TWA], [5 mg/m³ mist (respirable) 8-hr TWA]. ACGIH TLV: [10 mg/m³ (mist) 8-hr TWA].

Biological Limit Values

No biological limit values have been listed for the component(s) of this product.

Appropriate Engineering Controls

Ensure adequate ventilation, especially in confined areas. Apply technical measures to comply with the occupational exposure limits.

General Hygiene Considerations

Handle in accordance with good industrial hygiene and safety practice.

Personal Protective Equipment

Eye/face Protection.

If exposed to airborne mist, or if splashing is possible, appropriate safety glasses with

side-shields or safety goggles are recommended.

Skin and Body Protection

Oil resistant gloves are recommended. Appropriate body protection should be selected based on activity and possible exposure. Also take into consideration the specific local

conditions under which the product is used.

Respiratory Protection

In case of mist, spray or aerosol exposure wear suitable personal respiratory protection.



9. Physical and chemical properties

Appearance **Physical State** Light yellow Liquid

Odor Odor Threshold Slight Vegetable oil Not applicable

pН

Not applicable

Flash Point

Approx. 321 °C / 610 °F

Autoignition Temperature **Boiling point**

Not auto-flammable No information available Approx. -20 °C / -4 °F

Melting/Freezing Point Decomposition temperature Oxidizing Properties

No information available Not expected to be oxidising

Water Solubility Solubility(ies) **Evaporation Rate**

Insoluble

Vapor Pressure

Soluble in many organic solvents No information available

Vapor Density

No information available No information available Approx. 0.9 (H₂O=1)

Specific Gravity / Relative Density **Partition Coefficient**

No information available

(n-octanol/water)

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 No materials to be especially mentioned.

Hazardous Decomposition Products Thermal decomposition can lead to release of irritating gases and vapors. Carbon monoxide (CO). Carbon dioxide (CO2). Acrolein.

11. Toxicological information

Information on toxicological effects

Acute toxicity	Based on available data, no evidence of acute toxicity.
Skin corrosion/irritation	Based on available data, not, or only slightly irritating.
Serious eye damage/eye irritation	Based on available data, no evidence of serious eye damage / irritation.
Respiratory or skin sensitisation	Based on available data, not expected to be a skin or respiratory sensitiser.
Germ cell mutagenicity	Based on available data, the classification criteria are not met.
Carcinogenicity	Based on available data, no evidence of carcinogenicity.
Reproductive toxicity	Based on available data, no evidence of reproductive toxicity.
STOT - single exposure	Based on available data, the classification criteria are not met.
STOT - repeated exposure	Based on available data, the classification criteria are not met.
Aspiration hazard	Based on available data, no known aspiration hazard.

Potential health effects

Eves Not expected to pose health issues for the eye.

Skin Prolonged or excessive contact with skin may result in mild irritation, however, significant

health injuries are not expected under normal use.

Inhalation Health injuries are not known or expected under normal use. When in the form of an

airborne mist, refer to section 8 of this sheet for exposure limits pertaining to "vegetable oil

mist". Excessive inhalation of mist may result in respiratory irritation. Ingestion

Health injuries are not known or expected under normal use. Over exposure may cause:.

Gastrointestinal disturbance.

12. Ecological information

Ecotoxicity

Not classified for aquatic toxicity.

Persistence/Degradability

Mobility

PBT and vPvB assessment

The product is insoluble and floats on water.

This substance is not considered to be persistent, bioaccumulating nor toxic (PBT).

Other adverse effects Nothing specific known.

13. Disposal considerations

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

Readily biodegradable

Waste Disposal Methods

Dispose of in compliance with the laws and regulations pertaining to this product in your iurisdiction. 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.

Contaminated Packaging

Empty containers should be decontaminated and taken for local recycling, recovery or

waste disposal.

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 Marpol Annex II and Annex III (bulk) noxious liquid substance: pollution category Y, ship category 2(k). Packaged: not listed. If transported by vessel in bulk, transport according to Annex II of MARPOL 73 / 78 and the IBC code.

15. Regulatory information

International Inventories

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

			The state of the s					
	Chemical Name	TSCA	DSL	NDSL	ICL	EINECS	ELINCS	AICS
- 1	Sovbean oil	Yes					LLINGS	AICS
- 1	Soybean on	res	Yes	No	Yes	Yes	No	V
- 1				I	1		140	Yes
						232-274-4		

Chemical Name	ENCS ISHL	CHINA	PICCS	KECL	Taiwan	Turkey	NZIoC
Soybean oil	No	Yes	Yes	Yes KE-31718	Yes	Yes 232-274-4	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 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 not known to contain any HAPS.

State Regulations

California Proposition 65

This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins under California Proposition 65 at levels which would require a warning under the statute.

State Right-to-Know

Component Information.

Chemical NameWeight %MassachusettsMinnesotaNew JerseyPennsylvaniaSoybean oil99-100NoNoNoYes

<u>Canada</u>

(NPRI) Canadian National Pollutant Release Inventory

No known component is listed on NPRI.

16. Other information

Prepared By:

ADM - Product Regulatory Affairs

Revision Date:

17-Jan-2019

Revision Number:

2

Reason for revision:

Periodic review. 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

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 absorbtion

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 provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of sheet