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

Product Code:
860700

Contact Manufacturer:
Archer Daniels Midland Company
4666 Faries Parkway
Decatur, IL 62526, USA
Telephone Number: (+1) 217-424-5200

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	Physical State	Odor
Light yellow	Liquid	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 Oil Unknown, or Variable Composition, or of Biological Origin (UVCB)
Description Soybean Oil

Non-hazardous Components

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 (CO_2) 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 (CO_2).
Specific Hazards Arising from the Chemical	Risk of ignition. 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. Cool closed containers exposed to fire with water spray.
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

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	Light yellow
Physical State	Liquid
Odor	Slight Vegetable oil
Odor Threshold	Not applicable
pH	Not applicable
Flash Point	Approx. 321 °C / 610 °F
Autoignition Temperature	Not auto-flammable
Boiling point	No information available
Melting/Freezing Point	Approx. -20 °C / -4 °F
Decomposition temperature	No information available
Oxidizing Properties	Not expected to be oxidising
Water Solubility	Insoluble
Solubility(ies)	Soluble in many organic solvents
Evaporation Rate	No information available
Vapor Pressure	No information available
Vapor Density	No information available
Specific Gravity / Relative Density	Approx. 0.9 (H_2O=1)
Partition Coefficient (n-octanol/water)	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 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 (CO_2). 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

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.

12. Ecological information

Ecotoxicity
Not classified for aquatic toxicity.

Persistence/Degradability Readily biodegradable
Mobility The product is insoluble and floats on water.
PBT and vPvB assessment 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.

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.

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:

Chemical Name	TSCA	DSL	NDSL	ICL	EINECS	ELINCS	AICS
Soybean oil	Yes	Yes	No	Yes	Yes 232-274-4	No	Yes

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 Name	Weight %	Massachusetts	Minnesota	New Jersey	Pennsylvania
Soybean oil	99-100	No	No	No	Yes

Canada

(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