



# Safety Data Sheet

Original Preparation Date: 14-Jun-2012

Revision Date: 19-May-2017

Revision Number: 1

## 1. Identification

**Product Name:**

ON-ROAD SOY METHYL ESTERS FOR B99 RINLESS  
MATERIAL

**Product Code:**

006630

**Synonyms:**

Soy derived fatty acid methyl esters, Methyl esters from soy oil

**Use of the Substance / Preparation:**

Fuel

**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

May cause irritation of respiratory tract. 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**

Slight

**Classification according to 29 CFR 1910 and SOR/2015-17, amended to conform to the United Nations' Globally Harmonized System of Classification and Labelling of Chemicals (GHS)**

Carcinogenicity	Category 2
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Signal Word:	Warning
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GHS Hazard Pictogram(s):	
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Hazard Statement(s):	H351 Suspected of causing cancer
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**Prevention Precautionary Statements:**

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection.

**Response Precautionary Statements:**

If swallowed or inhaled: Call a Poison center or doctor/physician if you feel unwell. If exposed or concerned: Get medical advice/attention.

**Storage Precautionary Statements:**

Store locked up.

**Disposal Precautionary Statements:**

Dispose of contents/container in accordance with all applicable national and local regulations.

### 3. Composition/information on ingredients

**Chemical nature of the preparation** Mixture

**Chemical Family** Esters

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
Fuel oil No. 2	68476-30-2	< / = 1	OSHA / GHS: Carc. 2. See section 8 for OELs.
Methyl alcohol	67-56-1	< / = 0.2	Flam. 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
Fatty Acids, soya, methyl esters	68919-53-9	>99	None known

*Components which are not considered to be health hazards under paragraph (d) of 29 CFR §1910.1200 (HCS 2012) or SOR/2015-17 (WHMIS 2015) are not required to be disclosed. 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.*

#### Additives / Other Ingredients:

Contains less than 0.1% of the following: Naphthalene.

### 4. First-aid measures

#### Description of first aid measures

**Eye Contact** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

**Skin Contact** Wash off immediately with soap and plenty of water.

**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** Contact with eyes may cause irritation.

**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** 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.

**Methods and Materials for Containment and Cleaning Up**

Clean-up methods - small spillage. Soak up with inert absorbent material. Pick up and transfer to properly labelled containers.

Clean-up methods - large spillage. Dam up. Remove by pumping. Keep in suitable, closed containers for disposal. Clean contaminated surface thoroughly.

## 7. Handling and storage

**Handling**

Ensure adequate ventilation. Do not use pressure to empty drums.

**Storage**

Store in 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**

Components with workplace control parameters.

Chemical Name	ACGIH TLV	OSHA PEL	Mexico	NIOSH
Fuel oil No. 2	TWA: 100 mg/m <sup>3</sup> total hydrocarbons inhalable fraction and vapor Diesel fuel			
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.**

If splashes are likely to occur, wear goggles

**Skin and Body Protection**

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.

**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>Granulometry</b>	No information available
<b>Odor</b>	Slight
<b>Odor Threshold</b>	No information available
<b>pH</b>	No information available
<b>Flash Point</b>	> 130.000 °C / > 266.000 °F
<b>Autoignition Temperature</b>	No information available
<b>Boiling point</b>	> 200.000 °C / 392.000 °F
<b>Melting/Freezing Point</b>	No information available
<b>Decomposition temperature</b>	No information available
<b>Oxidizing Properties</b>	No information available
<b>Water Solubility</b>	Insoluble
<b>Evaporation Rate</b>	[Butyl acetate = 1.0] < 1
<b>Vapor Pressure</b>	<2 mmHg
<b>Vapor Density</b>	(Air = 1.0) > 1
<b>Specific Gravity / Relative Density</b>	( H <sub>2</sub> O = 1 ) 0.88
<b>Partition Coefficient</b> (n-octanol/water)	No information available

## 10. Stability and reactivity

**Stability** Stable under normal conditions.

**Possibility of Hazardous Reactions** Hazardous polymerization does not occur.

**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

Acute toxicity		Based on available data, the classification criteria are not met.			
Chemical Name	Weight %	LD50 Oral	LD50 Dermal	LC50 Inhalation	
Fuel oil No. 2	< / = 1		2000 mg/kg Rabbit		
Methyl alcohol	< / = 0.2	5628 mg/kg Rat	15800 mg/kg Rabbit	64000 ppm Rat 4 h 83.2 mg/L Rat 4 h	
Skin corrosion/irritation		Based on available data, not, or only slightly irritating.			
Serious eye damage/eye irritation		Based on available data, not, or only slightly irritating.			
Respiratory or skin sensitisation		Based on available data, not expected to be a skin or respiratory sensitiser.			
Germ cell mutagenicity		Not expected to be mutagenic.			
Carcinogenicity		Contains > 0.1% of a category 2 carcinogen. The table below indicates whether each agency has listed any ingredient, at levels greater than or equal to 0.1%, as a known or anticipated carcinogen.			
Chemical Name	Weight %	OSHA	NTP	ACGIH	IARC
Fuel oil No. 2	< / = 1			A3 - Confirmed Animal Carcinogen	
Reproductive toxicity		The product, as a whole, is not considered to be a reproductive hazard according to the classification criteria of OSHA/GHS.			
STOT - single exposure		No evidence of toxicity.			
STOT - repeated exposure		No evidence of toxicity.			
Aspiration hazard		Based on available data, the classification criteria are not met.			

### Potential health effects

**Eyes**

Contact with eyes may cause irritation.

**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.

## 12. Ecological information

### Ecotoxicity

Component Information:

Chemical Name	Fresh Water Algae	Acute Fish Toxicity	Daphnia (Water flea)	Effects on micro-organisms	Other
Fuel oil No. 2		LC50: 96h 35mg/L (Pimephales promelas) flow-through			
Methyl alcohol		LC50: 96h 18-20ml/L (Oncorhynchus mykiss) static LC50: 96h 19500-20700mg/L (Oncorhynchus mykiss) flow-through			

Chemical Name	log Kow	BCF
Methyl alcohol	-0.77	

### Persistence/Degradability

No information available

### Mobility

The product is insoluble and floats on water.

### 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.

### Contaminated Packaging

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

## 14. Transport information

### Domestic transport regulations (USA)

DOT

### 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 (or exempt from) the following inventories:

**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 contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 CFR 103-302. In order to comply with EPCRA 304, Hazardous Substances and their Reportable Quantities, spills or discharges into the environment of a hazardous substance in a quantity equal to or exceeding the RQ within any 24-hour period, must immediately be reported to the National Response Center (Phone: 800-424-8802).

**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
Naphthalene	91-20-3	0.005	Carcinogen

**State Right-to-Know**

Component Information.

Chemical Name	Weight %	Massachusetts	Minnesota	New Jersey	Pennsylvania
Fuel oil No. 2	< / = 1	No	No	No	No
Methyl alcohol	< / = 0.2	Yes	Yes	Yes 1222	Yes Environmental hazard
Naphthalene	0.005	No	Yes	No	Yes

**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
Naphthalene	0.005	Part 4 Substance as set out in Section 65 of the List of Toxic Substances in Schedule 1 of the Canadian Environmental Protection Act, 1999

**16. Other information**

Prepared By: ADM Fuels & Industrials

**Original Preparation Date:** 14-Jun-2012  
**Revision Date:** 19-May-2017  
**Revision Number:** 1  
**Reason for revision:** Implementation into software system.

**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 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 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.**

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