

This Material Safety Data Sheet complies with the United States Occupational Safety and Health Administration (OSHA) hazard communication standard.


SECTION I - PRODUCT AND SUPPLIER INFORMATION

General Product Name: Biodiesel (B99.9)
 Synonyms: Fatty Acid Methyl Ester (FAME)
 Chemical Family: Methyl Ester from Lipid Source with 0.1% petroleum diesel
 Formula: C14-C24 Methyl Ester
 CAS No.: Mixture
 Manufacturer: American Biodiesel, Inc. d.b.a. Community Fuels
 809-C Snedeker Ave., Stockton CA 95203
 (209) 466 4823 (non-emergency)

Emergency # (CHEMTREK) 1-800-424-9300

SECTION II - CHEMICAL COMPOSITION

CHEMICAL	CAS #	% (w/w)	Exposure Limits	LC50, Aq.*	LC50*	LD50*
B100: Mixture of fatty acid methyl esters (FAMES) from vegetable and animal fats	Methyl soyate (67784-80-9) and other FAMES	>=99.9	OIL MIST: ACGIH: TWA - 5mg/m3, STEL 10mg/m3	48-hr, 2.8-4.6 ug/L (trout)	Skin >2000 mg/kg	> 5000 mg/kg
No. 2 Ultra Low Sulfur Diesel	68476-30-2	<=0.1	10 ppm TWA 50 mg/m3 TWA 15 ppm STEL 75 mg/m3 STEL	ND	ND	ND

* Determined by applying rapeseed methyl and/or ethyl esters.

SECTION III - HAZARDS IDENTIFICATION

Routes of Entry:

INHALATION Negligible unless heated to produce vapors. Vapors or finely misted materials may cause irritation and inflammation of mucous membranes. Decomposition fumes may be hazardous. Avoid inhaling vapors, decomposition fumes, or finely misted material.

EYE CONTACT May cause irritation. Avoid contact with eyes.

SKIN CONTACT Prolonged or repeated contact is not likely to produce significant skin irritation. Thermal burns are possible if material is hot.

INGESTION No hazards anticipated from ingestion incidental to industrial exposure. May cause nausea.

CARCINOGENITY The International Agency for Research on Cancer (IARC) and the Environmental Protection Agency (EPA) have determined that naphthalene, present in petroleum diesel fuel, could be a possible human carcinogen.

SECTION IV - FIRST AID MEASURES

Seek medical attention if symptoms persist.



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EYES	Irrigate eyes with a heavy water stream for at least 15 minutes.
SKIN	Wash exposed area with soap and water.
INHALATION	Remove to fresh air.
INGESTION	Give one or two glasses of water to drink. Never give anything by mouth to an unconscious person.

SECTION V - FIREFIGHTING MEASURES

This material will burn although it is not easily ignited.

Flash point:	> 266 F (130 C) (ASTM 93)	Lower/Upper Explosion Limit:	ND
	COMBUSTIBLE LIQUID	Sensitivity to Impact:	Low
Autoignition temperature:	ND	Sensitivity to Static Discharge:	Low

Extinguishing Media: Dry chemical, foam, clean agent, CO₂, water spray (mist).
Water stream may splash the burning liquid and spread fire.

Special fire fighting procedures: Use water spray to cool containers exposed to fire.

Unusual fire hazard: Biodiesel-soaked rags or absorbents can cause spontaneous combustion if stored near combustibles and not handled properly. Store biodiesel-soaked rags or absorbents in approved safety containers and dispose of properly.

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) HAZARD INDEX:

HEALTH:	0
FLAMMABILITY:	1
REACTIVITY:	0
SPECIAL HAZARDS:	

SECTION VI - ACCIDENTAL RELEASE MEASURES

Remedial Measures:	Remove sources of ignition, contain spill to smallest area possible. Stop leak; use absorbent material. Wash hard surfaces with safety solvent or detergent to remove oil film to eliminate slipping hazards.
Personal Protection:	Wear appropriate PPE when responding to a release. See Section VIII.
Environmental Precautions:	Contain release to prevent further contamination of soil, surface water or groundwater. Biodiesel will create a sheen on water.
Disposal:	Where feasible and appropriate, remove contaminated soil. Dispose of contaminated materials in a manner consistent with applicable regulations.
Reporting:	U.S. regulations require reporting spills of this material that could reach any surface waters.

SECTION VII - HANDLING AND STORAGE

Handling procedures:	No smoking or open flame in storage, use or handling areas.
Storage:	Store in closed containers. Keep away from oxidizing agents, excessive heat, and ignition sources. Store in well-ventilated areas. Avoid storage for prolonged periods of time.



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Material compatibility, metals: Brass, bronze, copper, lead, tin, and zinc may accelerate the oxidation of diesel and biodiesel fuels and potentially create fuel insolubles (sediments) or gels and salts when reacted with some fuel components. Lead solders and zinc linings should be avoided, as should copper pipes, brass regulators, and copper fittings. Affected equipment should be replaced with stainless steel, carbon steel, or aluminum.

Material compatibility, polymers: B100 will degrade, soften, or seep through some hoses, gaskets, seals, elastomers, glues, and plastics with prolonged exposure. Nitrile rubber compounds, polypropylene, polyvinyl, and Tygon materials are particularly vulnerable to B100. Materials such as Teflon, Viton, fluorinated plastics, and Nylon are generally compatible with B100.

SECTION VIII - EXPOSURE CONTROLS AND PERSONAL PROTECTION

Engineering Controls: In confined areas, local and general ventilation should be provided.

Respiratory Protection: If mists are generated, wear a NIOSH-approved particulate respirator.

Skin protection: Nitrile gloves are recommended to prevent skin contact.

Eye and Face Protection: Safety glasses, goggles, or face shields are recommended to protect eyes and face from splash hazards.

SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point: >200 C (1 atm)

Specific gravity: 0.87-0.89

Vapor Density: >1 (Air=1)

Evaporation Rate: <1 (Butyl acetate=1)

Vapor Pressure: < 2 mmHg

Appearance: Clear to dark orange liquid

Odor: Mild, oily/fatty

Odor Threshold: ND

Solubility in water: Negligible

pH: Not applicable

SECTION X - STABILITY AND REACTIVITY

General: This product is stable and hazardous polymerization will not occur.

Incompatible Materials: Strong oxidizing agents.

Hazardous combustion products: Combustion produces carbon monoxide, carbon dioxide, products of incomplete combustion, including particulates, and thick smoke.

SECTION XI - TOXICOLOGICAL and ECOLOGICAL INFORMATION

Biodiesel Fuel

Oral - Albino rats treated with neat rapeseed methyl and ethyl esters and 50% or 20% blends of

Aquatic - The 48 hour LC50 value for rapeseed methyl ester in rainbow trout was in the range of 2.8-4.6 ug/L. For Daphnia magna, 48 hour LC50's for 100% rapeseed ethyl ester, 100% rapeseed methyl ester, 100% methyl soyate, and 100% diesel were reported to be 99, 23, 332, and cl.43 ppm, respectively.

Biodegradability - Biodiesel (soy diesel) undergoes faster biodegradation than diesel, with a faster rate under aerobic conditions (100% degradation in 7 days) than anaerobic conditions (100% degradation in 14 days).

Source: *Comprehensive Health and Environmental Effects of Biodiesel as an Alternative Fuel*. Koo-Oshima, S.; Hahn, N.; Van Gerpen, J. Full report: http://www.biodiesel.org/resources/reportsdatabase/reports/gen/19981001_gen-251.pdf

SECTION XII - DISPOSAL INFORMATION

Review federal, provincial or state, and local government requirements prior to disposal. Store material for disposal as indicated in Section "Handling and Storage". Disposal by controlled incineration or by secure land fill may be acceptable.

SECTION XIII - TRANSPORT INFORMATION

UN Hazard Class	N/A
National Motor Freight Classification:	
Proper Shipping Name:	Fatty Acid Ester
Identification No.:	144920
Shipping Classification:	65

SECTION XIV - REGULATORY INFORMATION Based on B100

OSHA Status

This product is not hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29 CFR 1910.1200. However, thermal processing and decomposition fumes may be hazardous.

Petroleum diesel fuel is hazardous under the criteria of the Federal OSHA Hazard Communication Standard.

TSCA Status

B100 is listed on TSCA.

Petroleum diesel fuel is listed on TSCA.

CERCLA (Comprehensive Response Compensation and Liability Act):

B100 Not reportable.

Napthalene (in petroleum diesel fuel) 0.454 kg final RQ, 1 lb final RQ

SARA TITLE III (Superfund Amendments and Reauthorization Act):

Section 312 Extremely Hazardous Substances:

None

Section 311/312 Hazard Categories:

B100 Non-hazardous under Sections 311/312

Petroleum diesel fuel: Acute health hazard, chronic health hazard, fire hazard

Section 313 Toxic Chemicals: This product contains the following component(s) that may be subject to reporting on the Toxic Release Inventory (TRI) From R:

Napthalene 0.1% de minimis concentration

RCRA Status:



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If discarded in its purchased form, this product would not be a RCRA-hazardous waste either by listing or by characteristic. However, under RCRA it is the responsibility of the product user to determine whether a material containing the product or derived from the product should be classified as hazardous waste.

CALIFORNIA PROPOSITION 65:

The following statement is made in order to comply with the California Safe Drinking Water and Toxic Enforcement Act of 1986. This product contains the following chemicals which are known to the state of California to cause cancer, birth defects or other reproductive harm, and are subject to the requirements of California Proposition 65 (CA Health & Safety Code Section 25249.5):

Benzene (in petroleum diesel fuel): Cancer, Developmental and Reproductive Toxicant

Toluene (in petroleum diesel fuel): Developmental Toxicant

SECTION XV - OTHER

Prepared by: American Biodiesel, Inc. d.b.a. Community Fuels

Disclaimer: The information above is believed to be accurate and represents the best information currently available to us. Users should make their own investigations to determine the suitability of the information for their particular purposes. This document is intended as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. However, no representation, warranty or guarantee of any kind, express or implied, is made as to its accuracy, reliability or completeness and we assume no responsibility for any loss, damage or expense, direct or consequential, arising out of use. Accordingly, Community Fuels will not be responsible for damages resulting from use of or reliance upon this information.