

rgy Alternative Solutions Inc.

Material Safety Data Sheet

Section I: Product Identification

Common Product Name: Biodiesel (B100)
Chemical Name: Fatty Acid Methyl Esters
Product Description: Methyl Esters derived from oils and fats
Formula: C14-C24 Methyl Esters
Chemical Family: CAS No. 67784-80-9

Section II: Ingredients and Hazardous Classification

	Ingredient	Percent
Typical Composition:	C14-C24 Methyl Esters	99%

OSHA PEL: None
ACGH/TLV: None
SARA Title III Section 313: Not Listed

This product contains no hazardous materials

Section III: Physical and Chemical Characteristics

Boiling Point: >400⁰ F @ 72 mm Hg
Vapor Pressure: <1 mm Hg @ 72⁰ F
Evaporation Rate: less than .005 (Butyl Acetate = 1)
Specific Gravity: 0.88 @ 77⁰ F (Water = 1)
Solubility in Water: Insoluble
Appearance: Light to dark yellow oily liquid at room temperature

Section IV: Fire and Explosion Hazard Data

Flash Point (Method Used): >270⁰ F (PMCC)
Flammability Limits in Air, % by vol. lower: Not Applicable
Flammability Limits in Air, % by vol. upper: Not Applicable
NFPA Rating: Class IIIB Combustible Liquid
HMIS Rating: Health (0) Fire (1) Reactivity (0)

Extinguishing Media:

Water Spray, Dry Chemical, Foam or Carbon Dioxide.

Firefighting Procedures:

Water may be ineffective but should be used to keep fire-exposed containers cool. If a spill or leak has not ignited, use water to disperse vapors. Water spray may be used to flush spills away from sources of possible ignition.

Fire & Explosion Hazards:

Rags soaked in product can cause spontaneous combustion, and should be stored in a UL listed container or be washed with soap and water prior to storage. Fire Fighters should not enter enclosed or confined spaces without the proper protective equipment, including a full self contained breathing apparatus in the positive pressure demand mode.

Section V: Reactivity Data

Chemical Stability:	stable
Hazardous Polymerization:	will not occur
Conditions and Materials to Avoid:	avoid contact with strong oxidizers
Hazardous Decomposition Products:	carbon monoxide and carbon dioxide

Section VI: Health Hazard Data**Inhalation:**

Negligible unless liquid is heated to produce vapor. Vapor mist may cause irritation of mucous membranes, dizziness and nausea.

Ingestion: No hazards anticipated from ingestion incidental to industrial exposure

Eye Contact: May cause slight irritation.

Skin Contact: Not classified as a primary skin irritant or corrosive material

Emergency First Aid Procedures:

Inhalation: Remove to fresh air. Seek medical care if symptoms persist

Ingestion:

Give one or two glasses of water to drink. Contact physician or poison control center if gastro-intestinal symptoms develop.

Eye Contact: Irrigate eyes with water for at least 15 minutes

Skin Contact: Wash affected area with soap and water

Section VII: Precautions for Safe Handling and Use**Environmental Precautions:**

Avoid uncontrolled release of this material where spills are possible. A comprehensive spill response plan should be developed and implemented.

Spill or Leak Precautions

Contain spilled materials and transfer to secure containers. Use adsorbent materials if necessary. In the event of an uncontrolled release, the user should determine if the release is reportable under applicable laws and regulations.

Waste Disposal

All recovered material should be packaged, labeled, transported and disposed or reclaimed in conformance with applicable laws and regulations, and in conformance with good engineering practice.

Section VIII: Exposure Control/ Personal Protection Measures

Respiratory Protection: If vapors or mists are generated, wear a NIOSH approved organic vapor/mist respirator

Protective Clothing: Safety glasses, goggles or face shield recommended. PVC or other petroleum compatible gloves are recommended.

Ventilation: Mechanical

Section VIII: Transportation Information

UN Hazard Class: N/A

NMFC (National Motor Freight Classification):

Proper Shipping Name: Fatty Acid Ester

Identification Number: 144920

Shipping Classification: 65

Listed in TSCA inventory: Yes

Section X: Regulatory Information**OSHA Status:**

This product is not hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29 CFR 1910.1200. Thermal processing and decomposition fumes from this product may be hazardous as noted in sections V and VI.

TSCA Status: Listed with TSCA

CERCLA (Comprehensive Response Compensation and Liability Act):

Not reportable

SARA Title 3 (Superfund Amendments and Reauthorization Act): Not Reportable

RCRA Status:

This product is not considered a hazardous waste either by listing or characteristic. Under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be considered a hazardous waste.

California Proposition 65:

This product contains no chemicals known to the state of California to cause cancer.

Section XI: Other Information

The information in this document pertains only to the product described in Section I, and is not valid for material blended with or otherwise combined with the product described in Section I. The information and recommendations contained in this publication represent the best current information and opinion at the time of publication. Because individual conditions of use may vary, Energy Alternative Solutions Inc., makes no guarantee, expressed or implied, as to the accuracy, reliability, or completeness of the information contained in this publication, and assumes no responsibility for any loss, damage or expense, direct or consequential, arising out of its use. It is the responsibility of the user to satisfy to determine the suitability of this publication to their particular use, and to comply with federal and state regulations.