



SAFETY DATA SHEET

SDS ID NO.: 0346MAR019

Revision date 12/28/2021

1. IDENTIFICATION

Product Name	Marathon Petroleum Biodiesel
Synonym	B100 Biodiesel; B99 Biodiesel; Virgin Biodiesel; Soy Biodiesel; Rapeseed Biodiesel; Tallow Biodiesel; Canola Biodiesel; Soybean Esters B99 Biodiesel; SME Soy Methyl Ester; Biodiesel; B99.9; Biomass Based Diesel; Methyl Soyate; Fatty Acid Methyl Ester
Product code	0346MAR019
Chemical family	Fatty Acid Methyl Esters
Recommended use	Fuel. Non-Transportation Industrial Applications.
Restrictions on use	All others.
Manufacturer, Importer, or Responsible Party Name and Address	MARATHON PETROLEUM COMPANY LP 539 South Main Street Findlay, OH 45840
SDS Information	1-419-421-3070 (M-F; 8-5 EST)
24 Hour Emergency Telephone	CHEMTREC: 1-800-424-9300 (CCN# 13740)

2. HAZARD IDENTIFICATION

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Classification

Carcinogenicity	Category 2
Aspiration toxicity	Category 1
Acute aquatic toxicity	Category 2

Hazards Not Otherwise Classified (HNOC)

Not applicable

Label Elements

Danger

Suspected of causing cancer
May be fatal if swallowed and enters airways
Toxic to aquatic life



Appearance Yellow Liquid**Physical State** Liquid**Odor** Slight**Precautionary Statements - Prevention**

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
 Avoid release to the environment

Precautionary Statements - Response

IF exposed or concerned: Get medical attention
 If swallowed: Immediately call a poison center or doctor
 Do NOT induce vomiting

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container at an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

Biodiesel is a complex mixture of C16-C18 methyl esters derived from the processing of vegetable oil or animal fat and diesel fuel.

Composition Information

Name	CAS Number	% Concentration
Biodiesel (Fatty Acid, Methyl Ester)	68937-84-8	99-100
No. 2 Diesel Fuel	68476-34-6	<1

All concentrations are percent by weight unless material is a gas. Gas concentrations are in percent by volume.

4. FIRST AID MEASURES

First aid measures**General advice**

In case of accident or if you feel unwell, seek medical advice immediately (show directions for use or safety data sheet if possible).

Inhalation

Move victim to fresh air. Provide respiratory support, if necessary. Get medical attention if cough or other respiratory symptoms develop.

Skin contact

Immediately wash exposed skin with plenty of soap and water while removing contaminated clothing and shoes. Get medical attention if irritation or rash occurs. Wash contaminated clothing before re-use.

Eye contact

Flush immediately with large amounts of water for at least 15 minutes. Gently remove contacts while flushing. Eyelids should be held away from the eyeball to ensure thorough rinsing. Gently remove contacts while flushing. Get medical attention if irritation persists.

Ingestion

If swallowed, DO NOT induce vomiting. If spontaneous vomiting occurs, keep head below hips, or if patient is lying down, turn body and head to side to prevent aspiration and monitor for breathing difficulty. Get immediate medical attention.

Most important signs and symptoms, both short-term and delayed with overexposure**Adverse effects**

May cause sensitization by skin contact. Symptoms may include redness, itching, and inflammation. Aspiration hazard. May cause coughing, chest pains, shortness of breath, pulmonary edema and/or chemical pneumonitis. Repeated or prolonged skin contact may cause drying, reddening, itching and cracking. Preexisting skin conditions and/or respiratory disorders may be aggravated by exposure to this product.

Indication of any immediate medical attention and special treatment needed**Notes to physician**

INGESTION: Do not induce vomiting. Low viscosity product can be sucked into the lungs and cause damage after swallowing or vomiting. The metabolism of fatty acid methyl ester may release free methanol in the body that could induce metabolic acidosis with delayed effects. If a large amount of product is ingested, i.e. several ounces, consider the use of ethanol or fomepizole (Antizol) and hemodialysis. Consult standard literature or contact a poison control center for treatment details.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

For small fires, Class B fire extinguishing media such as CO₂, dry chemical or water spray can be used. Extinguishing foam should not be used. For large fires, water spray or fog can be used. Firefighting should be attempted only by those who are adequately trained and equipped with proper protective equipment.

Unsuitable extinguishing media

Do not use straight water streams to avoid spreading fire.

Specific hazards arising from the chemical

This product is not a flammable liquid per the OSHA Hazard Communication Standard, but may ignite and/or burn at temperatures exceeding the flash point. Spontaneous combustion may occur under high temperature, closed conditions if material is absorbed in various fiber matrices and oxygen is present (e.g. oily rags).

Hazardous combustion products

Smoke, carbon monoxide, and other products of incomplete combustion.

Explosion data**Sensitivity to mechanical impact:**

No.

Sensitivity to static discharge:

No.

Special protective equipment and precautions for firefighters

Firefighters should wear full protective clothing and positive-pressure self-contained breathing apparatus (SCBA) with a full face-piece, as appropriate. Avoid using straight water streams. Water spray and foam must be applied carefully to avoid frothing and from as far a distance as possible. Avoid excessive water spray application. Keep surrounding area cool with water spray from a distance and prevent further ignition of combustible material. Keep run-off water out of sewers and water sources.

Additional firefighting tactics

Not applicable

NFPA

Health 2

Flammability 1

Instability 0

Special Hazard -

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Keep public away. Isolate and evacuate area. Shut off source if safe to do so. Eliminate all ignition sources. All contaminated surfaces will be slippery.

Protective equipment

Use personal protection measures as recommended in Section 8.

Emergency procedures

Advise authorities and National Response Center (800-424-8802) if the product has entered a water course or sewer. Notify local health and pollution control agencies, if appropriate.

Environmental precautions

Avoid release to the environment. Avoid subsoil penetration.

Methods and materials for containment

Contain liquid with sand or soil. Prevent spilled material from entering storm drains, sewers, and open waterways.

Methods and materials for cleaning up

Use suitable absorbent materials such as vermiculite, sand, or clay to clean up residual liquids. Recover and return free product to proper containers. Clean contaminated surface

thoroughly.

7. HANDLING AND STORAGE

Safe handling precautions

NEVER SIPHON THIS PRODUCT BY MOUTH. Do not expose to heat, open flames, strong oxidizers or other sources of ignition. Avoid repeated and prolonged skin contact. Exercise good personal hygiene including removal of soiled clothing and prompt washing with soap and water. Do not cut, drill, grind or weld on empty containers since explosive residues may remain. Refer to applicable EPA, OSHA, NFPA and consistent state and local requirements.

Storage conditions

Store in properly closed containers that are appropriately labeled and in a cool, well-ventilated area. Store wiping rags in metal cans with tightly fitting lids. Corrosion and microbial growth are promoted by the presence of water. Avoid contamination by storing in water-free tanks with scheduled water drainage. Contact with copper/alloys, lead, tin and zinc may result in increased sediment and deposits that can plug filters. Degradation can be avoided by preventing temperature extremes and the presence of air during storage.

Incompatible materials

Strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Name	ACGIH TLV	OSHA PELS	NIOSH IDLH
Biodiesel (Fatty Acid, Methyl Ester) 68937-84-8	-	-	-
No. 2 Diesel Fuel 68476-34-6	100 mg/m ³ TWA Skin - potential significant contribution to overall exposure by the cutaneous route	-	-

Notes: No further information available.

Engineering measures

Ensure adequate ventilation, especially in confined areas. Local or general exhaust required when using at elevated temperatures that generate vapors or mists. Use mechanical ventilation equipment that is explosion-proof.

Personal protective equipment

Eye protection

Use goggles or face-shield if the potential for splashing exists.

Skin and body protection

Wear neoprene, nitrile or PVA gloves to prevent skin contact. Glove suitability is based on workplace conditions and usage. Contact the glove manufacturer for specific advice on glove selection and breakthrough times.

Respiratory protection

Breathing apparatus needed when aerosol or mist is formed. Observe respirator assigned protection factors (APFs) criteria cited in federal OSHA 29 CFR 1910.134. Self-contained breathing apparatus should be used for fire fighting.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes and clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Yellow Liquid
Physical State	Liquid
Color	Pale yellow
Odor	Slight
Odor Threshold	No data available.

<u>Property</u>	<u>Values (method)</u>
pH	Not applicable
Melting Point / Freezing Point	No data available.
Initial Boiling Point / Boiling Range	288-366 °C / 550-690 °F (ASTM D1160)
Flash Point	171-199 °C / 340-390 °F (ASTM D93)
Evaporation Rate	No data available.
Flammability (solid, gas)	Not applicable.
Flammability Limit in Air (%):	
Upper Flammability Limit:	No data available.
Lower Flammability Limit:	No data available.
Explosion Limits	No data available.
Vapor Pressure	No data available.
Vapor Density	No data available.
Specific Gravity / Relative Density	0.88
Water Solubility	No data available.
Partition Coefficient	No data available.
Autoignition Temperature	374-449 °C / 705-840 °F
Decomposition Temperature	No data available.
Kinematic Viscosity	3.90-4.05 cSt @ 40°C (ASTM D445)
VOC Content (%)	No data available.

10. STABILITY AND REACTIVITY

Reactivity	The product is non-reactive under normal conditions.
Chemical stability	The material is stable at 70°F (21°C), 760 mmHg pressure.
Possibility of hazardous reactions	None under normal processing.
Hazardous polymerization	Will not occur.
Conditions to avoid	Excessive heat, sources of ignition, open flame. Water contamination during storage.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	None known under normal conditions of use.

11. TOXICOLOGICAL INFORMATION

Potential short-term adverse effects from overexposures

Inhalation	Excessive inhalation of mist may result in respiratory irritation. Overheating may produce vapors which may cause respiratory irritation, dizziness and nausea.
Eye contact	Produces little or no irritation on direct contact with the eye.
Skin contact	Prolonged and repeated contact may cause defatting and drying of the skin and may lead to irritation and/or dermatitis.
Ingestion	Ingestion of large amounts may cause gastrointestinal disturbances. Aspiration into lungs may cause chemical pneumonia and lung damage.

Acute toxicological data

Name	Oral LD50	Dermal LD50	Inhalation LC50
Biodiesel (Fatty Acid, Methyl Ester) 68937-84-8	> 2000 mg/kg (Rat)	-	-
No. 2 Diesel Fuel 68476-34-6	> 5000 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	>1 - <5 mg/L (Rat) 4 h

Immediate and delayed effects as well as chronic effects from short and long-term exposure

This product is considered to have a low order of acute and chronic toxicity under normal use and storage conditions

Adverse effects related to the physical, chemical and toxicological characteristics

Signs and symptoms	Symptoms may include redness, itching, and inflammation. Aspiration hazard. May cause coughing, chest pains, shortness of breath, pulmonary edema and/or chemical pneumonitis. Repeated or prolonged skin contact may cause drying, reddening, itching and cracking.
Acute toxicity	None known.
Skin corrosion/irritation	None known.
Serious eye damage/eye irritation	None known.
Sensitization	None known.
Mutagenic effects	None known.
Carcinogenicity	Suspected of causing cancer.

Name	ACGIH (Class)	IARC (Class)	NTP	OSHA
No. 2 Diesel Fuel 68476-34-6	Confirmed animal carcinogen (A3)	Not Classifiable (3)	Not Listed	Not Listed

Reproductive toxicity	None known.
Specific Target Organ Toxicity (STOT) - single exposure	Not classified.
Specific Target Organ Toxicity (STOT) - repeated exposure	Not classified.
Aspiration hazard	May be fatal if swallowed or vomited and enters airways.

12. ECOLOGICAL INFORMATION

Ecotoxicity This product should be considered toxic to aquatic organisms.

Name	Fish	Crustacea	Algae/aquatic plants
Biodiesel (Fatty Acid, Methyl Ester) 68937-84-8	96-hr LC50 = 550 mg/L Zebrafish (semi-static)	-	-
No. 2 Diesel Fuel 68476-34-6	96-hr LC50 = 35 mg/l Fathead minnow (flow-through)	48-hr EL50 = 6.4 mg/l Daphnia magna	-

Persistence and degradability	Expected to be readily biodegradable under aerobic conditions.
Bioaccumulation	Not expected to bioaccumulate in aquatic organisms.
Mobility in soil	Insoluble and floats on water. May partition into air, soil and water.
Other adverse effects	No information available.

13. DISPOSAL CONSIDERATIONS

Description of waste residues	Long-term storage may result in decomposition of the oil and could result in a rancid odor.
Safe handling of wastes	Handle in accordance with applicable local, state, and federal regulations. Use personal

protection measures as required. Do not expose to heat, open flames, strong oxidizers or other sources of ignition.

Disposal of wastes / methods of disposal The user is responsible for determining if any discarded material is a hazardous waste (40 CFR 262.11). Dispose of in accordance with federal, state and local regulations.

Contaminated packaging disposal Empty containers should be completely drained and then discarded or recycled, if possible. Do not cut, drill, grind or weld on empty containers since explosive residues may be present. Dispose of in accordance with federal, state and local regulations.

14. TRANSPORT INFORMATION

DOT

UN/Identification No:	Not applicable
UN Proper Shipping Name:	Not Regulated
Transport Hazard Class(es):	Not applicable
Packing Group:	Not applicable

IATA

UN/Identification No:	Not applicable
UN Proper Shipping Name:	Not Regulated
Transport Hazard Class(es):	Not applicable
Packing Group:	Not applicable

IMDG

UN/Identification No:	Not applicable
UN Proper Shipping Name:	Not Regulated
Transport Hazard Class(es):	Not applicable
Packing Group:	Not applicable

15. REGULATORY INFORMATION

Regulatory Information

US TSCA Chemical Inventory This product and/or its components are listed on the TSCA Chemical Inventory or are exempt.

Canada DSL/NDSL Inventory This product and/or its components are listed either on the Domestic Substances List (DSL) or are exempt.

EPA Superfund Amendment & Reauthorization Act (SARA)

SARA Section 302 This product does not contain any component(s) included on EPA's Extremely Hazardous Substance (EHS) List above the de minimis threshold.

SARA Section 304 This product does not contain any component(s) identified as an EHS or a CERCLA Hazardous substance above the de minimis threshold.

SARA Section 311/312 The following EPA hazard categories apply to this product:

Carcinogenicity
Aspiration hazard

SARA Section 313 This product may contain component(s), which if in exceedance of the de minimus threshold, may be subject to the reporting requirements of SARA Title III Section 313 Toxic Release Reporting (Form R).

U.S. State Regulations

California Proposition 65

This product can expose you to chemicals which are known to the State of California to cause cancer, birth defects or other reproductive harm.

Name	California Proposition 65
No. 2 Diesel Fuel 68476-34-6	Engine exhaust, Carcinogen, initial date 10/01/90

For more information, go to www.P65Warnings.ca.gov.

State Right-To-Know Regulations The following component(s) of this material are identified on the regulatory lists below:

Name	New Jersey Right-To-Know	Pennsylvania Right-To-Know	Massachusetts Right-To-Know
No. 2 Diesel Fuel 68476-34-6	Listed	Listed	Not Listed

16. OTHER INFORMATION

Prepared by Toxicology & Product Safety

Revision Notes

Revision date 12/28/2021
Revised sections The following sections (§) have been updated:
 2. HAZARD IDENTIFICATION
 4. FIRST AID MEASURES
 6. ACCIDENTAL RELEASE MEASURES
 7. HANDLING AND STORAGE
 9. PHYSICAL AND CHEMICAL PROPERTIES
 11. TOXICOLOGICAL INFORMATION
 12. ECOLOGICAL INFORMATION

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information is intended as guidance for safe handling, use, processing, storage, transportation, accidental release, clean-up and disposal and is not considered 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 materials or in any process, unless specified in the text.