

Material Name: Diesel Fuel UL Sulfur B2 to B20 (Biodiesel) Blends

**SDS No. 9905 US GHS** 

Synonyms: Biodiesel; the specific Biodiesel blend may be abbreviated "B-%" where % is the percentage of biodiesel in the blend, such as Biodiesel B-2, B-5, B-10, B-20

## **Section 1 - Product and Company Identification**

#### **Manufacturer Information**

Hess Corporation 1 Hess Plaza Woodbridge, NJ 07095-0961 Phone: 732-750-6000 Corporate EHS Emergency #800-424-9300 CHEMTREC

www.hess.com (Environment, Health, Safety Internet Website)

## **Section 2 - Hazards Identification**

#### **GHS Classification:**

Flammable Liquids - Category 3 Carcinogenicity - Category 2

Specific Target Organ Systemic Toxicity (STOT) - Single Exposure Category 3

## GHS LABEL ELEMENTS

Symbol(s)



## Signal Word

Warning

## **Hazard Statements**

Flammable liquid and vapor.

Suspected of causing cancer.

May cause respiratory irritation.

May cause drowsiness or dizziness.

#### **Precautionary Statements**

#### Prevention

Keep away from heat/sparks/open flames/hot surfaces. No smoking

Keep container tightly closed.

Ground/bond container and receiving equipment.

Use explosion-proof electrical/ventilating/lighting/equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Avoid breathing fume/gas/mist/vapours/spray.

Wear protective gloves/protective clothing/eye protection/face protection.

SDS No. 9905

Material Name: Diesel Fuel UL Sulfur B2 to B20 (Biodiesel) Blends

### Response

IF ON SKIN (or hair): Wash with plenty of soap and water. Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

IF INHALED: Remove victim to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell.

IF exposed or concerned: Get medical advice/attention. In case of fire: Use water spray, fog or fire fighting foam.

#### **Storage**

Store in a well-ventilated place. Keep cool.

Store locked up.

## **Disposal**

Dispose of contents/container in accordance with local/regional/national/international regulations.

## \* \* \* Section 3 - Composition / Information on Ingredients \* \* \*

CAS#	Component	Percent
68476-34-6	Fuels, diesel, no. 2	80-98
61788-61-2	Fatty acids, tallow, methyl esters	1-20
67784-80-9	Soybean oil, methyl ester	1-20
91-20-3	Naphthalene	<0.1

This product is a blend of Biodiesel B-100 and petroleum-derived diesel fuel where the percentage of biodiesel blended into the final product is indicated as B-% - for example, B-5 is 5% biodiesel and 95% petroleum diesel. Biodiesel consists of plant-derived fatty acid methyl esters. Petroleum Diesel Fuel is a complex mixture of hydrocarbons with carbon numbers in the range C9 and higher produced from the distillation of petroleum crude oil.. Because of its predominating percentage in these biodiesel fuel blends, this SDS for Biodiesel Fuel reflects the characteristics of petroleum-derived diesel fuel.

## \* \* \* Section 4 - First Aid Measures \* \* \*

## First Aid: Eyes

In case of contact with eyes, immediately flush with clean, low-pressure water for at least 15 min. Hold eyelids open to ensure adequate flushing. Seek medical attention.

#### First Aid: Skin

Remove contaminated clothing. Wash contaminated areas thoroughly with soap and water or with waterless hand cleanser. Obtain medical attention if irritation or redness develops.

#### First Aid: Ingestion

DO NOT INDUCE VOMITING. Do not give liquids. Obtain immediate medical attention. If spontaneous vomiting occurs, lean victim forward to reduce the risk of aspiration. Monitor for breathing difficulties. Small amounts of material which enter the mouth should be rinsed out until the taste is dissipated.

#### First Aid: Inhalation

Remove person to fresh air. If person is not breathing, provide artificial respiration. If necessary, provide additional oxygen once breathing is restored if trained to do so. Seek medical attention immediately.

Page 2 of 10	Revision Date 8/30/12

SDS No. 9905

Material Name: Diesel Fuel UL Sulfur B2 to B20 (Biodiesel) Blends

# \* \* \* Section 5 - Fire Fighting Measures \* \* \*

## **General Fire Hazards**

See Section 9 for Flammability Properties.

Vapors may be ignited rapidly when exposed to heat, spark, open flame or other source of ignition. When mixed with air and exposed to an ignition source, flammable vapors can burn in the open or explode in confined spaces. Being heavier than air, vapors may travel long distances to an ignition source and flash back. Runoff to sewer may cause fire or explosion hazard.

#### **Hazardous Combustion Products**

Carbon monoxide, carbon dioxide and non-combusted hydrocarbons (smoke).

## **Extinguishing Media**

SMALL FIRES: Any extinguisher suitable for Class B fires, dry chemical, CO2, water spray, fire fighting foam, and other gaseous agents.

LARGE FIRES: Water spray, fog or fire fighting foam. Water may be ineffective for fighting the fire, but may be used to cool fire-exposed containers.

## **Unsuitable Extinguishing Media**

None

## Fire Fighting Equipment/Instructions

Small fires in the incipient (beginning) stage may typically be extinguished using handheld portable fire extinguishers and other fire fighting equipment. Firefighting activities that may result in potential exposure to high heat, smoke or toxic by-products of combustion should require NIOSH/MSHA- approved pressure-demand self-contained breathing apparatus with full facepiece and full protective clothing. Isolate area around container involved in fire. Cool tanks, shells, and containers exposed to fire and excessive heat with water. For massive fires the use of unmanned hose holders or monitor nozzles may be advantageous to further minimize personnel exposure. Major fires may require withdrawal, allowing the tank to burn. Large storage tank fires typically require specially trained personnel and equipment to extinguish the fire, often including the need for properly applied fire fighting foam.

## \* \* \* Section 6 - Accidental Release Measures \* \* \*

#### **Recovery and Neutralization**

Carefully contain and stop the source of the spill, if safe to do so.

### Materials and Methods for Clean-Up

Take up with sand or other oil absorbing materials. Carefully shovel, scoop or sweep up into a waste container for reclamation or disposal. Caution, flammable vapors may accumulate in closed containers.

## **Emergency Measures**

Evacuate nonessential personnel and remove or secure all ignition sources. Consider wind direction; stay upwind and uphill, if possible. Evaluate the direction of product travel, diking, sewers, etc. to confirm spill areas. Spills may infiltrate subsurface soil and groundwater; professional assistance may be necessary to determine the extent of subsurface impact.

## **Personal Precautions and Protective Equipment**

Response and clean-up crews must be properly trained and must utilize proper protective equipment (see Section 8).

Page 3 of 10	Revision Date 8/30/12

Material Name: Diesel Fuel UL Sulfur B2 to B20 (Biodiesel) Blends

#### **Environmental Precautions**

Protect bodies of water by diking, absorbents, or absorbent boom, if possible. Do not flush down sewer or drainage systems, unless system is designed and permitted to handle such material. The use of fire fighting foam may be useful in certain situations to reduce vapors. The proper use of water spray may effectively disperse product vapors or the liquid itself, preventing contact with ignition sources or areas/equipment that require protection.

SDS No. 9905

## **Prevention of Secondary Hazards**

None

# Section 7 - Handling and Storage \* \* \*

## **Handling Procedures**

Handle as a combustible liquid. Keep away from heat, sparks, excessive temperatures and open flame! No smoking or open flame in storage, use or handling areas. Bond and ground containers during product transfer to reduce the possibility of static-initiated fire or explosion.

Special slow load procedures for "switch loading" must be followed to avoid the static ignition hazard that can exist when higher flash point material (such as fuel oil) is loaded into tanks previously containing low flash point products (such as this product) - see API Publication 2003, "Protection Against Ignitions Arising Out Of Static, Lightning and Stray Currents."

## Storage Procedures

Keep away from flame, sparks, excessive temperatures and open flame. Use approved vented containers. Keep containers closed and clearly labeled. Empty product containers or vessels may contain explosive vapors. Do not pressurize, cut, heat, weld or expose such containers to sources of ignition.

Store in a well-ventilated area. This storage area should comply with NFPA 30 "Flammable and Combustible Liquid Code". Avoid storage near incompatible materials. The cleaning of tanks previously containing this product should follow API Recommended Practice (RP) 2013 "Cleaning Mobile Tanks In Flammable and Combustible Liquid Service" and API RP 2015 "Cleaning Petroleum Storage Tanks."

### **Incompatibilities**

Keep away from strong oxidizers.

# **Section 8 - Exposure Controls / Personal Protection**

#### **Component Exposure Limits**

Fuels, diesel, no. 2 (68476-34-6)

100 mg/m3 TWA (inhalable fraction and vapor, as total hydrocarbons, listed under Diesel fuel)

Skin - potential significant contribution to overall exposure by the cutaneous route (listed under

Diesel fuel)

#### Naphthalene (91-20-3)

ACGIH: 10 ppm TWA

15 ppm STEL

Skin - potential significant contribution to overall exposure by the cutaneous route

OSHA: 10 ppm TWA; 50 mg/m3 TWA NIOSH: 10 ppm TWA; 50 mg/m3 TWA

15 ppm STEL; 75 mg/m3 STEL

SDS No. 9905

Material Name: Diesel Fuel UL Sulfur B2 to B20 (Biodiesel) Blends

## **Engineering Measures**

Use adequate ventilation to keep vapor concentrations of this product below occupational exposure and flammability limits, particularly in confined spaces.

## Personal Protective Equipment: Respiratory

A NIOSH-approved air-purifying respirator with organic vapor cartridges or canister may be permissible under certain circumstances where airborne concentrations are or may be expected to exceed exposure limits or for odor or irritation. Protection provided by air-purifying respirators is limited.

Use a positive pressure, air-supplied respirator if there is a potential for uncontrolled release, exposure levels are not known, in oxygen-deficient atmospheres, or any other circumstance where an air-purifying respirator may not provide adequate protection.

### **Personal Protective Equipment: Hands**

Gloves constructed of nitrile, neoprene, or PVC are recommended.

### **Personal Protective Equipment: Eyes**

Safety glasses or goggles are recommended where there is a possibility of splashing or spraying.

## Personal Protective Equipment: Skin and Body

Chemical protective clothing such as of E.I. DuPont TyChem®, Saranex® or equivalent recommended based on degree of exposure. Note: The resistance of specific material may vary from product to product as well as with degree of exposure. Consult manufacturer specifications for further information.

## **Section 9 - Physical & Chemical Properties**

Odor: Mild, petroleum distillate odor Appearance: Clear, straw-yellow.

pH: ND Physical State: Liquid **Vapor Pressure:** 0.009 psia @ 70 °F (21 °C) Vapor Density: >1.0 **Boiling Point:** 320 to 690 °F (160 to 366 °C) Melting Point: ND

Solubility (H2O): Negligible **Specific Gravity:** 0.83-0.876 @ 60°F (16°C)

**Evaporation Rate:** Slow; varies with conditions VOC: ND Percent Volatile: 100% Octanol/H2O Coeff.: ND Flash Point: >125 °F (>52 °C) minimum Flash Point Method: PMCC

**Upper Flammability Limit** 7.5 Lower Flammability Limit 0.6 (UFL):

(LFL):

Burning Rate: ND Auto Ignition: 494°F (257°C)

# Section 10 - Chemical Stability & Reactivity Information

## **Chemical Stability**

This is a stable material.

#### **Hazardous Reaction Potential**

Will not occur.

## **Conditions to Avoid**

Avoid high temperatures, open flames, sparks, welding, smoking and other ignition sources.

#### **Incompatible Products**

Keep away from strong oxidizers.

#### **Hazardous Decomposition Products**

Carbon monoxide, carbon dioxide and non-combusted hydrocarbons (smoke).

Page 5 of 10	Revision Date 8/30/12

SDS No. 9905

Material Name: Diesel Fuel UL Sulfur B2 to B20 (Biodiesel) Blends

## \* \* \* Section 11 - Toxicological Information \* \* \*

## **Acute Toxicity**

#### **A: General Product Information**

Harmful if swallowed.

## B: Component Analysis - LD50/LC50

Naphthalene (91-20-3)

Inhalation LC50 Rat >340 mg/m3 1 h; Oral LD50 Rat 490 mg/kg; Dermal LD50 Rat >2500 mg/kg; Dermal LD50 Rabbit >20 g/kg

## Potential Health Effects: Skin Corrosion Property/Stimulativeness

Practically non-toxic if absorbed following acute (single) exposure. May cause skin irritation with prolonged or repeated contact. Liquid may be absorbed through the skin in toxic amounts if large areas of skin are repeatedly exposed.

## Potential Health Effects: Eye Critical Damage/ Stimulativeness

Contact with eyes may cause mild irritation.

## Potential Health Effects: Ingestion

Ingestion may cause gastrointestinal disturbances, including irritation, nausea, vomiting and diarrhea, and central nervous system (brain) effects similar to alcohol intoxication. In severe cases, tremors, convulsions, loss of consciousness, coma, respiratory arrest, and death may occur.

#### **Potential Health Effects: Inhalation**

Excessive exposure may cause irritations to the nose, throat, lungs and respiratory tract. Central nervous system (brain) effects may include headache, dizziness, loss of balance and coordination, unconsciousness, coma, respiratory failure, and death.

WARNING: the burning of any hydrocarbon as a fuel in an area without adequate ventilation may result in hazardous levels of combustion products, including carbon monoxide, and inadequate oxygen levels, which may cause unconsciousness, suffocation, and death.

#### **Respiratory Organs Sensitization/Skin Sensitization**

This product is not reported to have any skin sensitization effects.

#### Generative Cell Mutagenicity

This material has been positive in a mutagenicity study.

#### Carcinogenicity

## A: General Product Information

Suspected of causing cancer.

Studies have shown that similar products produce skin tumors in laboratory animals following repeated applications without washing or removal. The significance of this finding to human exposure has not been determined. Other studies with active skin carcinogens have shown that washing the animal's skin with soap and water between applications reduced tumor formation.

Page 6 of 10	Revision Date 8/30/12

SDS No. 9905

Material Name: Diesel Fuel UL Sulfur B2 to B20 (Biodiesel) Blends

## **B: Component Carcinogenicity**

Fuels, diesel, no. 2 (68476-34-6)

ACGIH: A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans (listed under Diesel

fuel)

#### Naphthalene (91-20-3)

ACGIH: A4 - Not Classifiable as a Human Carcinogen

NTP: Reasonably Anticipated To Be A Human Carcinogen (Possible Select Carcinogen)

IARC: Monograph 82 [2002] (Group 2B (possibly carcinogenic to humans))

### Reproductive Toxicity

This product is not reported to have any reproductive toxicity effects.

### Specified Target Organ General Toxicity: Single Exposure

This product is not reported to have any specific target organ general toxicity single exposure effects.

## **Specified Target Organ General Toxicity: Repeated Exposure**

This product is not reported to have any specific target organ general toxicity repeat exposure effects.

## **Aspiration Respiratory Organs Hazard**

The major health threat of ingestion occurs from the danger of aspiration (breathing) of liquid drops into the lungs, particularly from vomiting. Aspiration may result in chemical pneumonia (fluid in the lungs), severe lung damage, respiratory failure and even death.

## \* \* \* Section 12 - Ecological Information \* \* \*

### **Ecotoxicity**

#### **A: General Product Information**

Keep out of sewers, drainage areas and waterways. Report spills and releases, as applicable, under Federal and State regulations.

#### B: Component Analysis - Ecotoxicity - Aquatic Toxicity

Fuels, diesel, no. 2 (68476-34-6)

96 Hr LC50 Oncorhynchus mykiss

96 Hr LC50 Oncorhynchus mykiss

Test & Species Conditions

96 Hr LC50 Pimephales promelas 35 mg/L [flow-through]

#### Naphthalene (91-20-3)

Test & Species Conditions

96 Hr LC50 Pimephales promelas 5.74-6.44 mg/L

[flow-through] 1.6 mg/L [flow-

0.91-2.82 mg/L

through]

[static]

96 Hr LC50 Pimephales promelas 1.99 mg/L [static] 96 Hr LC50 Lepomis macrochirus 31.0265 mg/L

[static]

72 Hr EC50 Skeletonema costatum 0.4 mg/L
48 Hr LC50 Daphnia magna 2.16 mg/L
48 Hr EC50 Daphnia magna 1.96 mg/L [Flow

through]

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SDS No. 9905

Material Name: Diesel Fuel UL Sulfur B2 to B20 (Biodiesel) Blends

48 Hr EC50 Daphnia magna 1.09 - 3.4 mg/L

[Static]

## Persistence/Degradability

No information available.

#### **Bioaccumulation**

No information available.

### **Mobility in Soil**

No information available.

## \* \* \* Section 13 - Disposal Considerations \* \* \*

## **Waste Disposal Instructions**

See Section 7 for Handling Procedures. See Section 8 for Personal Protective Equipment recommendations.

## **Disposal of Contaminated Containers or Packaging**

Dispose of contents/container in accordance with local/regional/national/international regulations.

\* \* \* Section 14 - Transportation Information \* \* \*

### **DOT Information**

Shipping Name: Diesel Fuel

UN #: 1202 Hazard Class: 3 Packing Group: III

Placard:



# \* \* \* Section 15 - Regulatory Information \* \* \*

## **Regulatory Information**

#### **Component Analysis**

This material contains one or more of the following chemicals required to be identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65) and/or CERCLA (40 CFR 302.4).

#### Naphthalene (91-20-3)

CERCLA: 100 lb final RQ; 45.4 kg final RQ

#### SARA Section 311/312 – Hazard Classes

Acute Health Chronic Health Fire Sudden Release of Pressure Reactive X -- -- ---

#### **SARA SECTION 313 - SUPPLIER NOTIFICATION**

This product may contain listed chemicals below the de minimis levels which therefore are not subject to the supplier notification requirements of Section 313 of the Emergency Planning and Community Right- To-Know Act (EPCRA) of 1986 and of 40 CFR 372. If you may be required to report releases of chemicals listed in 40 CFR 372.28, you may contact Hess Corporate Safety if you require additional information regarding this product.

Page 8 of 10	Revision Date 8/30/12

SDS No. 9905

Material Name: Diesel Fuel UL Sulfur B2 to B20 (Biodiesel) Blends

**State Regulations** 

#### **Component Analysis - State**

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	CA	MA	MN	NJ	PA	RI
Fuels, diesel, no. 2	68476-34-6	No	No	No	Yes	No	No
Naphthalene	91-20-3	Yes	Yes	Yes	Yes	Yes	No

The following statement(s) are provided under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):

WARNING! This product contains a chemical known to the state of California to cause cancer.

#### **Component Analysis - WHMIS IDL**

No components are listed in the WHMIS IDL.

#### **Additional Regulatory Information**

#### **Component Analysis - Inventory**

Component	CAS#	TSCA	CAN	EEC
Fuels, diesel, no. 2	68476-34-6	Yes	DSL	EINECS
Soybean oil, methyl ester	67784-80-9	Yes	DSL	EINECS
Fatty acids, tallow, methyl esters	61788-61-2	Yes	DSL	EINECS
Naphthalene	91-20-3	Yes	DSL	EINECS

## \* \* \* Section 16 - Other Information \* \* \*

NFPA® Hazard Rating Health

Fire 2 Reactivity 0



**HMIS**® **Hazard Rating** Health 1\* Slight

Fire 2 Moderate Physical 0 Minimal \*Chronic

1

## Key/Legend

EPA = Environmental Protection Agency; TSCA = Toxic Substance Control Act; ACGIH = American Conference of Governmental Industrial Hygienists; IARC = International Agency for Research on Cancer; NIOSH = National Institute for Occupational Safety and Health; NTP = National Toxicology Program; OSHA = Occupational Safety and Health Administration., NJTSR = New Jersey Trade Secret Registry.

Page 9 of 10 Revision Date 8/30/12

Material Name: Diesel Fuel UL Sulfur B2 to B20 (Biodiesel) Blends SDS No. 9905

### **Literature References**

None

#### Other Information

Information presented herein has been compiled from sources considered to be dependable, and is accurate and reliable to the best of our knowledge and belief, but is not guaranteed to be so. Since conditions of use are beyond our control, we make no warranties, expressed or implied, except those that may be contained in our written contract of sale or acknowledgment.

Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Additionally, vendor assumes no responsibility for injury to vendee or third persons proximately caused by abnormal use of the material, even if reasonable safety procedures are followed. Furthermore, vendee assumes the risk in their use of the material.

End of Sheet

Page 10 of 10	Revision Date 8/30/12