



NICHOLL OILS

SAFETY DATA SHEET - BIODIESEL B7

SECTION 1.

PRODUCT AND COMPANY IDENTIFICATION

PRODUCT:

UN 1202

Product Name: Biodiesel

Product description: Petroleum hydrocarbons.

Uses: Use only as an automotive combustible. Do not use as solvent or cleaner agent. For specific applications see the technical sheet or ask the representative of Nicholl (Fuel) Oils Ltd.

Synonyms: Biodiesel blend, Biodiesel 7%.

COMPANY IDENTIFICATION:

Supplier: Nicholl (Fuel) Oils Ltd.

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Eglinton,
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SECTION 2.

HAZARDS IDENTIFICATION

CLASSIFICATIONS:

- Flammable liquid. Category 3
- Skin irritant. Category 2
- Eyes irritant. Category 2B
- Carcinogenic. Category 2
- Acute toxicity. Inhalation. Category 4
- Chronic aquatic toxicity. Category 2

PICTOGRAMS:



SIGNAL WORD:

DANGER

PHYSICAL HAZARDS:

- Flammable liquid and vapors.
- May be fatal if inhaled. Never use mouth to siphon diesel.
- May cause skin irritation.
- May cause eyes irritation.
- Has been identified as a suspect of cause cancer if is repeatedly overexposure by inhalation and/or skin contact.
- Toxic if is inhaled.
- May cause drowsiness and dizziness by inhalation.
- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

**HEALTH HAZARDS:****Inhalation:**

In applications where vapors (caused by high temperature) or mists (caused by mixing or spraying) are created, breathing may cause a mild burning sensation in the nose, throat and lungs. Toxic and harmful if inhaled. Aspiration may result in chemical pneumonia, severe lung damage and respiratory failure

Eye:

If irritation occurs, a temporary burning sensation, minor redness, swelling, and/or blurred vision may result.

Skin Contact:

May cause skin irritation with continuous or repeated contact, causing pain, redness and swelling. Other adverse effects not expected from brief skin contact

Ingestion:

This material may be harmful or fatal if swallowed. Ingestion may result in vomiting; aspiration (breathing) of vomitus into lungs must be avoided as even small quantities may result in aspiration pneumonitis. Generally considered to have a low order of acute oral toxicity.

ENVIRONMENTAL HAZARDS

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

NFPA hazards ID: **Health:** 1 **Flammability:** 2 **Reactivity:** 0

SECTION 3. COMPOSITION AND CHEMICAL INFORMATION ON INGREDIENTS

INGREDIENTS	CAS NUMBER	CONCENTRATION (vol)
Diesel Oil No. 2	Mixture	93-100%
Methyl Esther	67784-80-9	<1 - 7%
Naphthalene	91-20-3	<1 - 5%

SECTION 4 FIRST AID MEASURES**Inhalation:**

Remove from further exposition. DO NOT attempt to rescue victim unless proper respiratory protection is worn. If the victim has difficulty breathing or tightness of the chest, is dizzy, vomiting or unresponsive, give 100% oxygen with rescue breathing or CPR as required and transport to the nearest medical facility.

Skin:

Remove contaminated clothing. Flush with large amounts of water for at least 15 minutes and follow by washing with soap if available. If redness, swelling, pain and/or blisters occur, transport to the nearest medical facility for additional treatment.

Eye:

Flush eyes with plenty of water while holding eyelids open. Rest eyes for 30 minutes. If redness, burning, blurred vision or swelling occurs, transport to nearest medical facility for additional treatment.

Ingestion:

DO NOT INDUCE VOMITING. If spontaneous vomiting occurs, lean the victim forward to reduce the risk of aspiration. Monitor for breathing difficulties. In general no treatment is necessary unless large quantities are swallowed; however, get medical advice. Have victim rinse mouth out with water, and then drink sips of water to remove taste from mouth. If vomiting occurs spontaneously, keep head below hips to prevent aspiration.

Note to Physician:



If more than 2.0ml/kg body weight has been ingested and vomiting has not occurred, an emesis should be induced with supervision. Keep victim's head below hips to prevent aspiration. If symptoms such as loss of gag reflex, convulsions, or unconsciousness occur before emesis, gastric lavage using a cuffed endotracheal tube should be considered.

SECTION 5

FIRE FIGHTING MEASURES

Flammability Properties:

Flash Point [Method]: >131 °F/>55 °C [Closed Cup]
Autoignition Temperature: 500 °F/260 °C
Flammability in Air: 0.5 - 4.4 %volume

Extinguishing Media:

Material will float and can be re-ignited on surface of water. Use water fog, 'alcohol foam', dry chemical or carbon dioxide (CO₂) to extinguish flames. Do not use a direct stream of water.

Fire Fighting Instructions:

CAUTION! COMBUSTIBLE. Clear fire area of all non-emergency personnel. Do not enter confined fire space without full bunker gear (helmet with face shield, bunker coats, gloves and rubber boots), including a positive pressure, self-contained breathing apparatus (NIOSH approved type). Cool surrounding equipment, fire-exposed containers and structures with water. Container areas exposed to direct flame contact should be cooled with large quantities of water (500 gallons water per minute flame impingement exposure) to prevent weakening of container structure.

Unusual Fire Hazards:

Vapors are flammable and heavier than air. Vapors may travel across the ground and reach remote ignition sources causing a flashback fire danger.

Hazardous Combustion Products:

Incomplete combustion products: smoke, fumes, aldehydes, oxides of carbon, sulfur oxides.

SECTION 6

ACCIDENTAL RELEASE MEASURES

Protective Measures:

CAUTION! COMBUSTIBLE. Eliminate potential sources of ignition including traffic of vehicles. Evacuate the affected area. Handling equipment must be bonded and grounded to prevent sparking. Firefighting foam can be used to cover the spilled area to reduce ignition hazards. Protect the sewers to avoid its contamination.

Wear appropriate personal protective equipment when cleaning up spills. Refer to Section 8.

Spill Management:

Shut off source of leak if safe to do so. Dike and contain spill. Eliminate sources of ignition.

FOR LARGE SPILLS: Remove with vacuum truck or pump to storage/salvage vessels.

FOR SMALL SPILLS: Soak up residue with an absorbent such as clay, sand or other suitable material. Place in non-leaking container and seal tightly for proper disposal.

FOR WATER SPILLS: If Flash Point exceeds the ambient temperature by 10 degrees Celsius or more, use containment booms and remove from the water surface with suitable absorbents or by skimming. If the Flash Point does not exceed the ambient temperature by less than 10 degrees Celsius, use booms as a barrier to protect shorelines and allow the material to evaporate. Seek the advice of a specialist before using dispersants.



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SECTION 7

HANDLING AND STORAGE

Precautionary Measures:

CAUTION! COMBUSTIBLE. Do not breathe material. Do not siphon by mouth. Keep container closed. Use only with adequate ventilation. Avoid heat, open flames, including pilot lights, and strong oxidizing agents. Surfaces that are sufficiently hot may ignite liquid material. Use explosion-proof ventilation to prevent vapor accumulation. Ground all handling equipment to prevent sparking. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling.

The material is static accumulator.

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 – see API Publication 2003, "Protection Against Ignitions Arising Out of Static, Lightning and Stray Currents".

Storage:

Keep liquid and vapor away from heat, sparks and flame. Extinguish pilot lights, cigarettes and turn off other sources of ignition prior to use and until all vapors has dissipated. Use explosion-proof ventilation indoors and in laboratory settings.

Container Warnings:

Keep containers closed when not in use. Containers, even those that have been emptied, can contain explosive vapors. Do not cut, drill, grind, weld or perform similar operations on or near containers.

SECTION 8

EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limits

If vapors and mist are generated, concentrations should be controlled in the work place to minimal levels. Accomplish with local permissible concentration limits. When are not established, it is recommended to accomplish with the following PEL values.

Diesel oil No. 2	ACGIH	TWA: 100 mg/m ³		
Nonens & isomers	ACGIH	TWA: 200 ppm 8 hour(s).		
Naphthalene	ACGIH	TWA: 10 ppm	STEL: 15 ppm 15min	Skin
	OSHA	TWA: 10 ppm		
Cumene	ACGIH	TWA: 50 ppm		
	OSHA	TWA: 50 ppm		Skin
Xylene & isomers	ACGIH	TWA: 100 ppm	STEL: 150 ppm	
	OSHA	TWA: 100 ppm		

PERSONAL PROTECTION

Personal protective equipment (PPE) selections vary based on potential exposure conditions such as handling practices, concentration and ventilation. Information on the selection of eye, skin and respiratory protection for use with this material is provided below.

Respiratory Protection:

If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker health, an approved respirator must be worn. Respirator selection, use and maintenance should be in accordance with the requirements of the OSHA Respiratory Protection Standard, 29 CFR 1910.134. Types of respirator(s) to be considered in the selection process include:
Supplied-Air Respirator. Air-Purifying Respirator for Organic Vapors. Self-contained breathing apparatus for use in environments with unknown concentrations or emergency situations.



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SECTION 9

PHYSICAL AND CHEMICAL PROPERTIES

Appearance & Odor: Bright and clear liquid (may be dyed). Petroleum oil-type odor.

Odor threshold: 0.1 - 1 ppm

pH: N/A.

Boiling point range: 154° C (309° F) to 372° C (702° F)

Fusion/Freezing point: -26°C (-15°F); Freezing requires laboratory conditions

Vapor pressure: <0.3 kPa (<2 mm Hg) (at 20°C)

Flash Point (PMCC): 55°C (131°F). (ISO2719 / IP34 / D93)

Explosivity limits range: 0.5 - 4.4% (vol)

Vapor density (air = 1): > 4.5

Density (ISO12185 / IP365 / D4052): 15 Kg/mL @ 15° C

Solubility in water: 0.0005 g/100 mL

Partition coefficient (n-octane/water): > 3.3 as log Pow

Volatility: 840 g/l VOC (w/v)

Viscosity (ISO3104 / IP71 / D445): 2.0 – 4.5 cSt @ 40° C

Autoignition temperature: 257°C (495°F)

SECTION 10

REACTIVITY AND STABILITY

Stability:

Material is stable under normal conditions.

Conditions to Avoid:

Avoid heat and open flames.

Materials to Avoid:

Avoid contact with strong oxidizing agents: Halogens, Strong acids, Alkalies.

Hazardous Decomposition Products:

Thermal decomposition products are highly dependent on combustion conditions. A complex mixture of airborne solids, liquids and gases will evolve when this material undergoes pyrolysis or combustion.

Aldehydes, Carbon Monoxide, Carbon Dioxide, Ketones and other unidentified organic compounds may be formed upon combustion.

SECTION 11

TOXICOLOGICAL INFORMATION

Acute Toxicity

Dermal LD50 > 5 ml/kg(Rabbit) OSHA: Non-Toxic Based on similar material(s)

Eye Irritation Non-Irritating [Rabbit] OSHA: Non-Irritating Based on similar material(s)

Oral LD50 9 ml/kg(Rat) OSHA: Non-Toxic Based on similar material(s)

Skin Irritation Extremely irritating [Rabbit] OSHA: Irritating Based on similar material(s)

Carcinogenicity Classification

#2 Diesel

NTP: No IARC: No ACGIH: No OSHA: No

SECTION 12

ECOLOGICAL INFORMATION

ECOTOXICITY:

Sweet water toxicity:

Concentration: 2400 ppm. Exposure: 48 hrs. Species: Squalius cephalus Analysis: TLM

Concentration: >127 ppm. Exposure: 96 hrs Species: Lepomis macrochirus. Analysis: LC₅₀

Sea water toxicity:

Concentration: 10 ppm Exposure: 96 horas Species: Brevoortia patronus Analysis: LC₅₀



Concentration: 10 ppm Exposure: 96 horas Species: Herv shrimp Analysis: LC₅₀

MOBILITY:

Highly volatile material will partition rapidly to air. Not expected to partition to sediment and wastewater solids. Other high molecular weight components have low solubility, floats, and are expected to migrate from water to the shoreline. Expected to partition to sediment and wastewater solids.

PERSISTENCE AND DEGRADABILITY:

Biodegradation: Expected to be inherently biodegradable for the majority of components.

Atmospheric Oxidation: more volatile components expected to degrade rapidly in air.

BIOACCUMULATION POTENTIAL:

The majority of components have the potential to bioaccumulate; however metabolism or physical properties may reduce the bioconcentration or limit bioavailability.

SECTION 13

DISPOSAL CONSIDERATIONS

DISPOSAL RECOMMENDATIONS:

The material is suitable for burning in an enclosed controlled burner for fuel value or disposal by supervised incineration at very high temperatures to prevent formation of undesirable combustion products.

REGULATORY DISPOSAL RECOMMENDATIONS:

Under RCRA, it is the responsibility of the user of the material to determine, at the time of the disposal, whether the material meets RCRA criteria for hazardous waste. This is because material uses, transformations, mixtures, processes, etc. may affect the classification. Refer to the latest EPA, state and local regulations regarding proper disposal.

Empty Container Warning:

PRECAUTIONARY LABEL TEXT: Empty containers will retain residue and can be dangerous. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION; THEY MAY EXPLODE AND CAUSE INJURY OR DEATH. Do not attempt to refill or clean container since residue is difficult to remove. Empty drums should be completely drained, properly bunged and promptly returned to a drum reconditioner. All containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations.

SECTION 14

TRANSPORT INFORMATION

ADR/RID: Gasoline Flammable liquid Class 3 Item 3(b) Hazard Identification Num. 33

UN: Diesel Oil No. 2 Flammable liquid Class 3. Packing group II Num. U.N. 1202

IATA/ICAO: Diesel Oil No. 2 Flammable liquid Class 3 Packing group II

IMO: Diesel Oil No. 2 Flammable liquid Class 3.1 Marine contaminant (P)

US Department of Transportation Classification (DOT)

Proper Shipping Name:	Diesel Fuel
Identification Number:	NA1202
Hazard Class/Division:	Combustible Liquid
Packing Group:	III

Flash Point of this product is greater than 100 °F. This material is not regulated under 49CFR (DOT) in a container of 119 gallon capacity or less when transported solely by land, as long as the material is not hazardous waste, a marine pollutant, or specifically listed as a hazardous substance.

International Air Transport Association

Hazard Class/Division: 3 (Flammable Liquid)
Identification Number: UN1202
Packing Group: III
Proper Shipping Name: Diesel Fuel

International Maritime Dangerous Goods (IMDG) Code
Proper Shipping Name: Diesel Fuel
Hazard Class/Division: 3 (Flammable Liquid)
EMS Number: F-E, S-E
Packing Group: III
UN Number: 1202



SECTION 15

REGULATORY INFORMATION

FEDERAL REGULATORY STATUS

OSHA Classification:

Product is hazardous according to the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Superfund Amendment & Reauthorization Act (SARA) Title III:

SARA Extremely Hazardous Substances (302/304):

Hydrogen sulfide RQ 100 lbs Reportable Spill => 711013 lbs or 100334 gallons

SARA Hazard Categories (311/312):

Immediate Health: YES Delayed Health: YES Fire: YES Pressure: NO Reactivity: NO

Other Chemical Inventories:

Australian AICS, Canadian DSL, European EINECS, Korean Inventory,

SECTION 16

OTHER INFORMATION

Revision#: 2

Revision Date: 13/JUN/2016

Revisions since last change (discussion): This Safety Data Sheet (SDS) has been reviewed to fully comply with the guidance contained in the ANSI SDS standard (ANSI Z400.1/Z129.1-2010). We encourage you to take the opportunity to read the SDS and review the information contained therein.

THE INFORMATION CONTAINED IN THIS DATA SHEET IS BASED ON THE DATA AVAILABLE TO US AT THIS TIME, AND IS BELIEVED TO BE ACCURATE BASED UPON THAT : IT IS PROVIDED INDEPENDENTLY OF ANY SALE OF THE PRODUCT, FOR PURPOSE OF HAZARD COMMUNICATION. IT IS NOT INTENDED TO CONSTITUTE PRODUCT PERFORMANCE INFORMATION, AND NO EXPRESS OR IMPLIED WARRANTY OF ANY KIND IS MADE WITH RESPECT TO THE PRODUCT, UNDERLYING DATA OR THE INFORMATION CONTAINED HEREIN. YOU ARE URGED TO OBTAIN DATA SHEETS FOR ALL PRODUCTS YOU BUY, PROCESS, USE OR DISTRIBUTE, AND ARE ENCOURAGED TO ADVISE THOSE WHO MAY COME IN CONTACT WITH SUCH PRODUCTS OF THE INFORMATION CONTAINED HEREIN.

Nicholl (Fuel) Oils Ltd.