

# MATERIAL SAFETY DATA SHEET



Date Issued: 08/31/2006

MSDS No: B20

Revision No: New MSDS

## BIODIESEL 20%

### 1. PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** BIODIESEL 20%

**PRODUCT CODE:** B20

**MANUFACTURER**

Tarr, LLC

P.O. Box 12570

Portland OR 97212

**Transportation:** 503-288-5294

**Service Number:** 503-288-5294

**24 HR. EMERGENCY TELEPHONE NUMBERS**

**CHEMTREC (US Transportation) :**(800) 424 - 9300

**CANUTEC (Canadian Transportation) :**(613) 996 - 6666

### 2. HAZARDS IDENTIFICATION

**EMERGENCY OVERVIEW**

**IMMEDIATE CONCERNS:** COMBUSTIBLE - Harmful or fatal if swallowed - Can enter lungs and cause damage. May cause eye and skin irritation or injury.

**POTENTIAL HEALTH EFFECTS**

**EYES:** Liquid is moderately irritating to the eyes. High vapor concentrations may also be irritating.

**SKIN:** Prolonged or repeated contact is not likely to cause significant skin irritation. Material is sometimes encountered at elevated temperatures. Thermal burns are possible.

**INGESTION:** Oral LD50 not established. Do not ingest.

**INHALATION:** Negligible unless heated to produce vapors. Vapors or finely misted materials may irritate the mucous membranes and cause irritation, dizziness, and nausea.

**MEDICAL CONDITIONS AGGRAVATED:** Pre-existing eye and skin disorders may be aggravated by exposure.

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt. %	CAS
Methyl Soyate	20	67784-80-9
GASOIL - UNSPECIFIED - FUEL, DIESEL NO.2	80	68476-34-6
GASOIL - UNSPECIFIED - DISTILLATES (PETROLEUM), HYDRODESULPHURIZED MIDDLE	0 - 80	64742-80-9
Distillates (Petroleum), Straight Run Middle	0 - 80	64741-44-2
STRAIGHT RUN Kerosine - Kerosine (Petroleum)	0 - 20	8008-20-6
Kerosine - UNSPECIFIED - Kerosine (Petroleum), HYDRODESULPHURIZED	0 - 20	64742-81-0
CRACKED GASOIL - DISTILLATES (PETROLEUM), LIGHT CATALYTIC CRACKED	0 - 40	64741-59-9
Naphthalene	0.02 - 0.2	000091-20-3

#### 4. FIRST AID MEASURES

**EYES:** Immediately flush eyes with plenty of water for at least 15 minutes while holding eyelids open. Get medical attention, if irritation occurs or persists.

**SKIN:** Remove contaminated clothing/shoes. Flush skin with water. Follow by washing with soap and water. If irritation occurs, get medical attention. Do not reuse clothing until cleaned.

**INGESTION:** If swallowed, give one or two glasses of water to drink. Never give anything by mouth to an unconscious person. If gastro-intestinal symptoms develop, consult medical personnel.

**INHALATION:** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, oxygen should be administered by qualified personnel. Seek immediate medical attention.

#### 5. FIRE FIGHTING MEASURES

**FLASHPOINT AND METHOD:** > 52°C (125°F) Pensky-Martens CC

**FLAMMABLE LIMITS:** 0.6 to 4.7

**AUTOIGNITION TEMPERATURE:** > 257°C (494°F)

**EXTINGUISHING MEDIA:** Use water fog, "alcohol" foam, dry chemical, or CO2.

**HAZARDOUS COMBUSTION PRODUCTS:** Carbon monoxide and unidentified organic compounds may be formed during combustion.

**EXPLOSION HAZARDS:** Oil soaked rags can cause spontaneous combustion if not handled properly. Before disposal, wash rags with soap and water and dry in well ventilated area.

**FIRE FIGHTING EQUIPMENT:** The use of SCBA is recommended for firefighters. Water spray may be used to cool containers exposed to heat or flame.

#### 6. ACCIDENTAL RELEASE MEASURES

**GENERAL PROCEDURES:** Remove all sources of ignition and provide ventilation. Wear protective clothing as given in section 8. Dike area to contain spill. Take precautions as necessary to prevent contamination of ground and surface waters. Recover spilled material with absorbent, such as sawdust or vermiculite, and sweep into closed containers for disposal using non-sparking equipment. Do not flush to sewer. If area of spill is porous, remove as much contaminated earth and gravel, etc. as necessary and place in closed containers for proper disposal.

## 7. HANDLING AND STORAGE

**GENERAL PROCEDURES:** Keep containers tightly closed when not in use. Store between 50 F and 120 F. Keep away from oxidating agents, excessive heat and ignition sources. Store and use in well ventilated areas. Do not store or use near heat, spark or flame and store out of sun. Do not puncture, drag or slide container. Drum is not a pressure vessel; never use pressure to empty. DO NOT cut or weld empty drums unless thoroughly cleaned.

**HANDLING:** Use with sufficient ventilation to keep employee exposure below recommended limits. Provide adequate ventilation for storage, handling and use, especially for enclosed or low spaces. Avoid contact of liquid with eyes and prolonged skin exposure. Do not allow product to contact open flame or electrical heating elements because dangerous decomposition products may form. Ground and bond all equipment when transferring from one container to another.

**STORAGE:** Store away from heat, sparks, and open flame. Keep containers tightly closed when not in use. Do not weld, cut, grind, solder, or drill on or near empty containers. Empty containers may contain explosive concentrations of product vapors.

**COMMENTS:** KEEP OUT OF REACH OF CHILDREN! Empty containers retain product residue (liquid and/or vapor) 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.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### EXPOSURE GUIDELINES

OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200)					
		EXPOSURE LIMITS			
		OSHA PEL		ACGIH TLV	
Chemical Name		ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>
Naphthalene	TWA	10	50	10	52
	STEL			15	79

**ENGINEERING CONTROLS:** Local exhaust ventilation may be necessary to control any air contaminants to within their TLVs during the use of this product.

### PERSONAL PROTECTIVE EQUIPMENT

**EYES AND FACE:** Safety glasses with side shields or chemical goggles are recommended for any type of industrial chemical handling.

**SKIN:** Wear resistant gloves (consult your safety equipment supplier). To prevent repeated or prolonged

skin contact, wear impervious clothing and boots.

**RESPIRATORY:** If exposure may or does exceed occupational exposure limits (Sec. 8) use a NIOSH approved respirator to prevent overexposure. In accord with 29 CFR 1910.134 use either an atmosphere-supplying respirator or an air-purifying respirator for organic vapors.

**PROTECTIVE CLOTHING:** Use protective clothing which is chemical resistant to this material. Safety shoes and boots should also be chemical resistant.

**WORK HYGIENIC PRACTICES:** Use good personal hygiene when handling this product. Wash hands after use, before eating, drinking, smoking, or using the toilet.

**OTHER USE PRECAUTIONS:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

**COMMENTS:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**PHYSICAL STATE:** Liquid

**ODOR:** Bland odor.

**PHYSICAL STATE COMMENTS:** Liquid

**pH:** NA = Not Applicable

**PERCENT VOLATILE:** Nil

**VAPOR PRESSURE:** < 100 mmHg

**VAPOR DENSITY:** 100 (Air=1)

**Notes:** Heavier than air.

**BOILING POINT:** > 200°C 760 mm Hg

**FREEZING POINT:** NDA = no data available.

**MELTING POINT:** No data available.

**SOLUBILITY IN WATER:** Negligible

**EVAPORATION RATE:** < 1 (n-Butyl Acetate=1)

**SPECIFIC GRAVITY:** 1.000 to 0.88

**Notes:** H<sub>2</sub>O = 1

## 10. STABILITY AND REACTIVITY

**STABILITY:** Stable under normal conditions.

**POLYMERIZATION:** Will not occur.

**CONDITIONS TO AVOID:** Avoid heat, sparks, flame and contact with strong oxidizing agents.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Carbon monoxide and unidentified organic

compounds may be formed during combustion.

**INCOMPATIBLE MATERIALS:** Strong oxidizers.

## 11. TOXICOLOGICAL INFORMATION

### ACUTE

Chemical Name	ORAL LD <sub>50</sub> (rat)	DERMAL LD <sub>50</sub> (rabbit)	INHALATION LC <sub>50</sub> (rat)
Naphthalene	490	> 20	

**DERMAL LD<sub>50</sub>:** > 5 mL/kg (rabbit)

**ORAL LD<sub>50</sub>:** > 5 ml/kg (rat)

**INHALATION LC<sub>50</sub>:** > 5 (Results are for diesel fuel) mg/l (rat) 4 hour(s)

### CARCINOGENICITY

**NTP:** In a study conducted by the National Toxicology Program (NTP), mice exposed to 10 or 30 ppm of naphthalene by inhalation daily for two years had chronic inflammation of the nose and lungs and increased incidences of metaplasia in those tissues. The incidence of benign lung tumors (alveolar/bronchiolar adenomas) was significantly increased in the high-dose female group but not in the male groups. In another two-year inhalation study conducted by NTP, exposure of rats to 10, 30, and 60 ppm naphthalene caused increases in the incidences of a variety of nonneoplastic lesions in the nose. Increases in nasal tumors were seen in both sexes, including olfactory neuroblastomas in females at 60 ppm and adenomas of the respiratory epithelium in males at all exposure levels. The relevance of these effects to humans has not been established. No carcinogenic effect was reported in a 2-year feeding study in rats receiving naphthalene at 41 mg/kg/day.

**Notes:** This product may contain significant amounts of Polynuclear Aromatic Hydrocarbons (PAH's) which have been shown to cause skin cancer after prolonged and frequent contact with the skin of test animals. Brief or intermittent skin contact with this product is not expected to have serious effects if it is washed from the skin. While skin cancer is unlikely to occur in human beings following use of this product, skin contact and breathing, of mists, vapors or dusts should be reduced to a minimum.

**SENSITIZATION:** Not expected to be a skin sensitizer.

**GENETIC EFFECTS:** Naphthalene caused chromosome aberrations and sister chromatid exchanges in Chinese hamster ovary cells, but was not a mutagen in several other invitro tests.

**REPRODUCTIVE EFFECTS:** Naphthalene did not cause birth defects when administered orally to rabbits, rats, and mice during pregnancy, but slightly reduced litter size in mice at dose levels that were lethal to the pregnant females.

## 12. ECOLOGICAL INFORMATION

### AQUATIC TOXICITY (ACUTE)

**96-HOUR LC<sub>50</sub>:** 21-210 mg/l (Salmo gairdneri)

**48-HOUR EC<sub>50</sub>:** 20-210 mg/l (Daphnia magna)

**Notes:** 72 hour(s) EC<sub>50</sub>: 2.6-25 mg/l (Raphidocellus subcapitata)

All information in this section is related to diesel fuel.

This material is expected to be toxic to aquatic organisms.

**CHEMICAL FATE INFORMATION:** On release to the environment the light components of diesel fuel will generally evaporate but depending on local environmental conditions (temperature, wind, mixing or wave action, soil type, etc.) the remainder may become dispersed in the water column or absorbed to soil or sediment. Diesel fuel would not be expected to be readily biodegradable. In a modified Strum test (OECD method 301B) approximately 40% biodegradation was recorded over 28 days. However, it has been shown that most hydrocarbon components of diesel fuel are degraded in soil in the presence of oxygen. Under anaerobic conditions, such as in anoxic sediments, rates of biodegradation are negligible.

**GENERAL COMMENTS:** Keep out of waterways.

### 13. DISPOSAL CONSIDERATIONS

**DISPOSAL METHOD:** The preferred options for disposal are to send to licensed reclaimers, or to permitted incinerators. Any disposal practice must be in compliance with federal, state, and local regulations. Do not dump into sewers, ground, or any body of water.

**RCRA/EPA WASTE INFORMATION:** Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

### 14. TRANSPORT INFORMATION

#### DOT (DEPARTMENT OF TRANSPORTATION)

**PROPER SHIPPING NAME:** Diesel Fuel

**PRIMARY HAZARD CLASS/DIVISION:** 3

**UN/NA NUMBER:** NA 1993

**PACKING GROUP:** III

**NAERG:** 128

### 15. REGULATORY INFORMATION

#### UNITED STATES

#### SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

**311/312 HAZARD CATEGORIES:** This product should be reported as an immediate (acute) health hazard, delayed (chronic) health hazard, and a fire hazard.

**FIRE:** Yes   **PRESSURE GENERATING:** No   **REACTIVITY:** No   **ACUTE:** Yes  
**CHRONIC:** Yes

**313 REPORTABLE INGREDIENTS:** Naphthalene (91-20-3)

#### 302/304 EMERGENCY PLANNING

**EMERGENCY PLAN:** To the best of our knowledge, this product is not listed as an extremely hazardous substance.

#### TSCA (TOXIC SUBSTANCE CONTROL ACT)

**TSCA REGULATORY:** All ingredients are on the TSCA inventory or are not required to be listed on the TSCA inventory.

## 16. OTHER INFORMATION

**PREPARED BY:** P. Rodabaugh

**REVISION SUMMARY:** New MSDS

### HMIS RATING

<b>HEALTH:</b>	<input type="text"/>	<b>0</b>
<b>FLAMMABILITY:</b>	<input type="text"/>	<b>1</b>
<b>PHYSICAL HAZARD:</b>	<input type="text"/>	<b>0</b>
<b>PERSONAL PROTECTION:</b>	<b>B</b>	

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