

# Fleet Fuel Testing

## Material Safety Data Sheet

### Degraded Fuel Field Test FT-0120 and FT-0121

Revision date: June 5, 2017

#### 1. CHEMICAL PRODUCT and COMPANY IDENTIFICATION

COMPANY	Fleet Biodiesel, Inc. (dba Fleet Fuel Testing)
ADDRESS	2658 Del Mar Heights Rd, Ste 337 Del Mar, CA 92014 Tel +1.858.752.1156 Fax +1.866.519.5291
EMERGENCY PHONE #	1.858.752.1156 (Fleet Fuel Testing)
TRADE NAME	Degraded Fuel Test (FT-0120 and FT-0121)
GENERIC NAME	Degraded Fuel Test for Diesel Fuels
TSCA	TSCA 8(b) inventory: Potassium Hydroxide, Phenolphthalein, powder; Water; Isopropyl alcohol

#### 2. HAZARDS IDENTIFICATION

##### ACUTE HEALTH EFFECTS

Hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, . Slightly hazardous in case of skin contact (corrosive), of eye contact (corrosive), of inhalation (lung sensitizer), of ingestion. Non-corrosive for lungs. Liquid or spray mist may produce tissue damage particularly on mucous membranes of eyes, mouth and respiratory tract. Inhalation of the spray mist may produce irritation of respiratory tract.

##### CHRONIC HEALTH EFFECTS

CARCINOGENIC EFFECTS: Classified A4 (Not classifiable for human or animal.) by ACGIH, 3 (Not classifiable for human.) by IARC [Isopropyl alcohol]. Classified 1 (Clear evidence.) by NTP [Phenolphthalein, powder]. Classified 2B (Possible for human.) by IARC [Phenolphthalein, powder].

MUTAGENIC EFFECTS: Mutagenic for mammalian somatic cells. [Phenolphthalein, powder]. Mutagenic for mammalian somatic cells. [Potassium hydroxide].

DEVELOPMENTAL TOXICITY: Classified Reproductive system/toxin/female, Development toxin [POSSIBLE] [Isopropyl alcohol].

The substance may be toxic to kidneys, the reproductive system, the upper respiratory tract, the skin, the eyes.

Repeated or prolonged exposure to the substance can produce target organs damage.

#### 3. COMPOSITION and INGREDIENTS

COMPONENT NAME	CAS NUMBER	% TOTAL
Water	7732-18-5 49.5	95%

Isopropyl alcohol	67-63-0 49.5	4%
Potassium hydroxide	1310-58-3	<0.1%
Phenolphthalein, powder	77-09-8	<0.1%

#### Toxicological Data on Ingredients:

Phenolphthalein, powder LD50: Not available. LC50: Not available.

Isopropyl alcohol: ORAL (LD50): Acute: 5045 mg/kg [Rat]. 3600 mg/kg [Mouse]. 6410 mg/kg [Rabbit]. DERMAL (LD50): Acute: 12800 mg/kg [Rabbit].

Potassium hydroxide: ORAL (LD50): Acute: 273 mg/kg [Rat]. 365 mg/kg [Rat]. 388 mg/kg [Rat]

## 4. PHYSICAL AND CHEMICAL DATA

APPEARANCE	Red Liquid.
ODOR	Not available.
TASTE	Not available.
MOLECULAR WEIGHT	Not available.
pH (1% soln/water)	>10 (Basic)
BOILING POINT	The lowest known value is 100°C (212°F) (Water)
MELTING POINT	Not available.
CRITICAL TEMPERATURE	Not available.
SPECIFIC GRAVITY	The only known value is 1 (Water = 1) (Water).
VAPOR PRESSURE	The highest known value is 2.3 kPa (@ 20°C) (Water).
VAPOR DENSITY	The highest known value is 0.62 (Air = 1) (Water).
VOLATILITY	Not available.
ODOR THRESHOLD	Not available.
WATER/OIL DIST. COEFF.	Not available.
IONICITY (in Water)	Not available.
DISPERSION PROPERTIES	Not available.
SOLUBILITY	Soluble in water.
STORAGE	Protect against exposure to high temperatures; Keep container tightly closed when not in use.

## 5. OCCUPATIONAL EXPOSURE LIMITS

A PEL or TLV has not been established

## 6. FIRE AND EXPLOSION

FLAMMABILITY	NOT FLAMMABLE
FLASH POINT	Closed cup flashpoint is 50°C (123°F)
AUTOIGNITION TEMP.	The lowest known value is 399°C (750.2°F) (Isopropyl alcohol).
FLAMMABLE LIMITS	The greatest known limits are (Isopropyl alcohol)
LOWER:	2%
UPPER:	12%

#### FIRE AND EXPLOSION HAZARDS

Do not throw into any fire; potentially combustible ingredients may ignite, causing fire to spread, increasing risk of burns/injuries.

#### SPECIAL FIREFIGHTING PROCEDURES

Flammable liquid, soluble or dispersed in water.

SMALL FIRE: Use DRY chemical powder.

LARGE FIRE: Use alcohol foam, water spray or fog.

#### FIRE HAZARDS IN PRESENCE OF VARIOUS SUBSTANCES

Flammable in presence of open flames and sparks, of heat.

Flammable in presence of oxidizing materials.

Non-flammable in presence of shocks.

## 7. HEALTH HAZARDS

#### ROUTES OF EXPOSURE

Absorbed through skin. Eye contact. Inhalation. Ingestion.

#### INHALATION

May cause irritation of the respiratory tract and mucous membranes. Breathing large amounts may affect the brain, respiration (difficulty breathing), behavior (Central nervous system depression - headache, somnolence, irritability, dizziness, drowsiness, stupor, incoordination, unconsciousness, coma and possible death), peripheral nerve and sensation (peripheral nervous system), blood, urinary system, cardiovascular system, gastrointestinal system, and liver.

#### EYE CONTACT

May cause eye irritation with mild burns, tearing, redness, and swelling.

#### SKIN

May cause skin irritation with possible mild burns. Prolonged or repeated skin contact may cause dermatitis.

#### INGESTION

Swallowing large amounts may be harmful. Swallowing large amounts may cause gastrointestinal tract irritation with nausea, vomiting and diarrhea, abdominal pain and possible mild burns of the mouth, throat and stomach. It also may affect the urinary system, cardiovascular system, sense organs, behavior or central nervous system depression (somnolence, irritability, headache, dizziness, drowsiness, stupor, incoordination, unconsciousness, coma, narcosis), peripheral nervous system, liver, blood, metabolism, and respiratory system (breathing difficulty).

## 8. PROTECTIVE EQUIPMENT / CONTROL MEASURES

#### RESPIRATORY PROTECTION

No special respiratory protection equipment is recommended under anticipated conditions of normal use with adequate ventilation. Do not breathe gas/fumes/ vapor/spray. In case of insufficient ventilation, wear suitable respiratory equipment. If you feel unwell, seek medical attention.

#### EYE PROTECTION

Avoid contact with skin and eyes. Eye protection such as chemical splash goggles and/or face shield must be worn when possibility exists for eye contact due to splashing or spraying liquid, airborne particles, or vapor.

#### SKIN PROTECTION

Depending on the conditions of use, protective gloves, apron, boots, head and face protection should be worn. This equipment should be cleaned thoroughly after each use.

#### ENGINEERING CONTROLS

No special ventilation is recommended under anticipated conditions of normal use beyond that needed for normal comfort control. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value.

#### EXPOSURE LIMITS

Potassium hydroxide

CEIL: 2 from ACGIH (TLV) [United States] [1999]

Consult local authorities for acceptable exposure limits.

#### OTHER WORK PRACTICES

No special work practices are needed beyond the above recommendations under anticipated conditions of normal use.

## 9. EMERGENCY AND FIRST AID

#### INHALATION

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

#### EYE CONTACT

Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention immediately..

#### SKIN CONTACT

In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Cover the irritated skin with an emollient. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.

#### INGESTION

Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.

#### EMERGENCY MEDICAL TREATMENT PROCEDURES

Treat symptomatically.

## 10. SPILL AND DISPOSAL

#### PRECAUTIONS IF MATERIAL IS SPILLED OR RELEASED

##### **Small Spill:**

Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container. If necessary: Neutralize the residue with a dilute solution of acetic acid.

##### **Large Spill:**

Corrosive liquid.

Stop leak if without risk. Absorb with DRY earth, sand or other non-combustible material. Do not get water inside container. Do not touch spilled material. Use water spray curtain to divert vapor

drift. Prevent entry into sewers, basements or confined areas; dike if needed. Call for assistance on disposal. Neutralize the residue with a dilute solution of acetic acid. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

#### WASTE DISPOSAL METHODS

It is the responsibility of the generator to determine at the time of disposal whether the product meets the criteria of a hazardous waste. Waste must be disposed of in accordance with federal, state and local environmental control regulations. Comply with all applicable federal, state and local regulations. Use registered transporters.

## 11. ADDITIONAL PRECAUTIONS

#### HANDLING AND STORAGE PROCEDURES

Keep out of reach of children.

Keep tube tightly closed when not in use. Protect against exposure to high temperatures. Prevent contact with strong oxidizing agents. Reacts violently with acids, halogens, halogenated hydrocarbons, maleic anhydride, organic anhydrides, isocyanates, alkylene oxides, epichlorhydrin, aldehydes, alcohols, glycols, phenols, cresols, caprolactum solution. Also incompatible with nitro compounds (nitrobenzene, nitromethane, nitrogen trichloride), organic materials, acid anhydrides, acid chlorides, magnesium, peroxidized tetrahydrofuran, chlorine dioxide, maleic dicarbide, sugars.

## 12. LABEL INFORMATION

USE STATEMENT                      FOR INDUSTRIAL USE ONLY

SIGNAL WORD                        CAUTION

HEALTH HAZARDS                    MAY CAUSE EYE IRRITATION

#### PRECAUTIONARY MEASURES

AVOID CONTACT WITH EYES AND SKIN.  
WASH THOROUGHLY AFTER HANDLING.  
KEEP CONTAINER CLOSED WHEN NOT IN USE.  
AVOID CONTACT WITH STRONG OXIDIZING AGENTS.  
AVOID EXPOSURE TO HIGH TEMPERATURES.  
PROTECT AGAINST MOISTURE CONTAMINATION.  
KEEP OUT OF REACH OF CHILDREN.  
NOT FOR INTERNAL CONSUMPTION/DO NOT SWALLOW  
BEFORE USING PRODUCT, READ MATERIAL SAFETY DATA  
SHEET (MSDS).

## 13. SUPPLEMENT

#### HMIS RATING

Health	2
Flammability	3
Reactivity	1
Personal protection	h

## REGULATORY INFORMATION

TSCA status:

TSCA status: All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

California Proposition 65 Information:

This product contains the following substance known to the state of California to cause cancer: phenolphthalein

### **Federal and State Regulations:**

New York release reporting list: Potassium hydroxide

Pennsylvania RTK: Potassium hydroxide

Florida: Potassium hydroxide

Minnesota: Potassium hydroxide

Massachusetts RTK: Potassium hydroxide

New Jersey: Potassium hydroxide

TSCA 8(b) inventory: Potassium hydroxide; Water

CERCLA: Hazardous substances.: Potassium Hydroxide, 0.1N

Rhode Island RTK hazardous substances: Isopropyl alcohol

Pennsylvania RTK: Isopropyl alcohol

Florida: Isopropyl alcohol

Minnesota: Isopropyl alcohol

Massachusetts RTK: Isopropyl alcohol

New Jersey: Isopropyl alcohol

TSCA 8(b) inventory: Water; Isopropyl alcohol; Potassium Hydroxide; Phenolphthalein, powder

TSCA 4(a) final testing order: Isopropyl alcohol

TSCA 8(d) H and S data reporting: Isopropyl alcohol: Effective date: 12/15/86 Sunset Date: 12/15/96

**Other Regulations:** OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

### **Other Classifications:**

**WHMIS (Canada):** CLASS B-2: Flammable liquid with a flash point lower than 37.8°C (100°F).

### **DSCL (EEC):**

R11- Highly flammable.

R45- May cause cancer.

S7- Keep container tightly closed.

S16- Keep away from sources of ignition – No smoking.

S36/37/39- Wear suitable protective clothing, gloves and eye/face protection.

S45- In case of accident or if you feel unwell,

**Other Regulations:** OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

### **Other Classifications:**

**WHMIS (Canada):** CLASS E: Corrosive liquid.

### **DSCL (EEC):**

R36/37/38- Irritating to eyes, respiratory system and skin.

S24/25- Avoid contact with skin and eyes.

S36/37/39- Wear suitable protective clothing, gloves and eye/face protection.

### **HMIS (U.S.A.):**

**Health Hazard:** 2

**Fire Hazard:** 3

**Reactivity:** 0

**Personal Protection:** h

**National Fire Protection Association (U.S.A.):**

**Health:** 2

**Flammability:** 3

**Reactivity:** 0

**Specific hazard:****Protective Equipment:**

Gloves.

Lab coat.

Vapor respirator. Be sure to use an approved/certified respirator or equivalent.

Splash goggles.

**INTERNATIONAL STATUS**

Australia (AICS): included on inventory

Canada (DSL): included on inventory

China (CECS): included on inventory

Europe (EINECS): not included on inventory

Japan (ENCS): included on inventory

Korea (ECL): included on inventory

Philippines (PICCS): included on inventory

\*Note - qualifiers and codes used in this MSDS

EQ = Equal; AP = Approximately; LT = Less Than; GT = Greater Than;

TR = Trace; UK = Unknown; N/AP = Not Applicable; N/P = Not Applicable

**14. TRANSPORT INFORMATION**

US Department of Transportation (DOT): not regulated

International Maritime Dangerous Goods Code (IMDG): not regulated

IATA: Not classified as hazardous for transport

**15. REGULATORY INFORMATION**

The components in this product are either not CERCLA regulated, regulated but present in negligible concentrations, or regulated with no assigned reportable quantity.