SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT FORM: Liquid Substance
TRADE NAME: Biobor JF Microbicide
CHEMICAL NAME: Substituted Dioxaborinanes
COMPANY: Technol Fuel Conditioners, Inc.
145 Wyckoff Road
Eatontown, NJ 07724
Phone: 1.800.645.4033

EPA REGISTRATION: #652217-1 - Approved for On-Road and Off-Road Fuel Consumption
EMERGENCY PHONE: Chemtrec: 1.800.424.9300 - within USA and Canada
Chemtrec: 1.703.527.3887 - outside USA and Canada

SECTION 2. HAZARDS IDENTIFICATION

GHS SIGNAL WORD: DANGER!

GHS HAZARD PICTOGRAMS:

GHS CLASSIFICATIONS:

PHYSICAL:  H226: Flammable liquid and vapor
HEALTH:  H302: Harmful if swallowed
H312: Harmful in contact with skin
H320: Can cause eye irritation
H336: May cause drowsiness or dizziness
H373: May cause damage to organs through prolonged or repeated exposure
ENVIRONMENTAL:  H402: Harmful to aquatic life

GHS PRECAUTIONARY STATEMENTS:

P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233: Keep container tightly closed.
P261: Avoid breathing dust/fumes/gas/mist/vapors/spray [As modified by IV ATP].
P262: Do not get in eyes, on skin, or on clothing.
P273: Avoid release into the environment.
P301+P331: IF SWALLOWED, Do NOT induce vomiting.
P410+P411: Protect from sunlight. Store at temperatures between 45°F [7.2°C] and 85°F [29.4°C].

SECTION 3. COMPOSITION AND INGREDIENTS INFORMATION

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Hazard Date</th>
<th>% By Weight</th>
<th>CAS Number</th>
<th>SARA 311</th>
<th>SARA 312</th>
<th>SARA 313</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dioxaborinanes</td>
<td>Not Known</td>
<td>95%</td>
<td>8063-89-6</td>
<td>YES</td>
<td>YES</td>
<td>NONE</td>
</tr>
<tr>
<td>Naphtha</td>
<td>Not Known</td>
<td>4.5%</td>
<td>8030-30-6</td>
<td>NONE</td>
<td>NONE</td>
<td>NONE</td>
</tr>
<tr>
<td>Arsenic</td>
<td>CA Prop 65</td>
<td>Trace (&lt;0.01%)</td>
<td>7440-38-2</td>
<td>YES</td>
<td>YES</td>
<td>NONE</td>
</tr>
<tr>
<td>Coneg</td>
<td>CA Prop 65</td>
<td>No Data</td>
<td>No Data</td>
<td>NONE</td>
<td>NONE</td>
<td>NONE</td>
</tr>
</tbody>
</table>

Technol Fuel Conditioners, Inc. 102 Compliance: December 15, 2015
**SECTION 4. FIRST AID MEASURES**

**INHALATION:** Overexposure can cause dizziness, lack of coordination, and breathing complications, unlikely to occur under normal usage conditions. Handlers should always wear a self-contained breathing apparatus in the positive mode with a full face-piece due to the likelihood of fumes, smoke, and hazardous component decomposition. Remove to fresh air and deploy artificial respiration if not breathing. Get medical attention.

**SKIN CONTACT:** Can cause irritation of exposed skin due to defatting of skin tissue. Handlers should always wear rubber gloves. Wash exposed skin vigorously with general soap and water. Get medical attention if skin irritation persists.

**EYE CONTACT:** Can cause irritation of exposed eye tissue. Handlers should always wear splash-proof goggles. Rinse eyes with cool flowing water for at least 15 minutes and get immediate medical attention.

**INGESTION:** Can cause irritation of the gastrointestinal tract and possible fatal kidney liver damage. IMMEDIATELY INDUCE VOMITING. Deploy artificial respiration if not breathing. Get immediate medical attention.

**SECTION 5. FIREFIGHTING MEASURES**

**Special Hazards and Procedures:**
This product poses no unusual fire fighting problems. It will burn if involved in a fire. Oxides of sulfur (SO₂) will be given off while burning. Combustion may produce oxides of carbon and oxides of calcium. Water may be used to cool fire-exposed containers and structures but is not a suitable extinguishing media.

**Protective Equipment:**
As in any fire, firefighters must be equipped to prevent breathing of vapors or products of combustion. Wear an approved self-contained goggled breathing apparatus, protective gloves and clothing.

**Extinguishing Media:**
Dry chemical, CO₂ and foam are suitable. Water jets or any water-based fluid are not suitable. Closed containers may be cooled with water. Treat large fires as an oil fire. Oil will float on water and can cause fire to spread. Heat from fire can generate flammable vapor.

**SECTION 6. ACCIDENTAL RELEASE PRECAUTIONS**

**PERSONAL:** Wearing suitable protective equipment, eliminate sources of ignition and open nearby windows to ventilate the problem area.

**ENVIRONMENTAL:** Product has very low solubility in water. Prevent from entering sewer system, surface water or soil.

**FOR SPILL CLEAN-UP:** Shut off leak and dike up large spills. Absorb with an inert material such as sand, soil or vermiculite. Sweep up absorbent and dispose in accordance with regulatory requirements.

**SECTION 7. PRODUCT HANDLING & STORAGE**

**HANDLING:** This product is best stored in its original container. Steel or HDPE containers are recommended replacements and electrically bond and ground all containers and equipment. Avoid contact with eyes, skin and clothing. Avoid breathing vapors, aerosol and mists. Use with adequate ventilation and wash thoroughly after handling. Never use pressure to empty drums.

**STORAGE:** Full or partially-filled containers should always be kept upright and away from strong oxidizing agents. This product will pump down to 10°F [-12.2°C]. Nonetheless, it is recommended that full or partially-filled containers be stored in a cool dry place between 45° - 85°F [7.2° - 29.4°C]. Store in original container if possible, and keep all chemical containers away from direct sunlight and tightly closed when not in use.
**Biobor JF Microbicide**
**Safety Data Sheet**

According to Federal Register / Vol. 77, No. 58 / Rules & Regulations
Revision: 10/01/2015  Issued: 01/01/2005  Supersedes: 03/01/2006

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**SECTION 8. EXPOSURE CONTROL/PERSONAL PROTECTION**

**VENTILATION:** None normally required. Use additional ventilation if needed to control vapor concentrations particularly if a mist is generated or fumes from hot material are present.

**RESPIRATORY:** None required if area adequately ventilated. Use appropriate respiratory protection if used in confined areas. If used in an application where a mist may be generated, observe a TWA/PEL of 5 mg/m³ (OSHA, ACGIH) for a mineral oil mist. Use a respirator with dual organic vapor/mist and particulates cartridge if vapor concentration exceeds permissible exposure limit.

**SKIN PROTECTION:** Use neoprene-type gloves and apron.

**EYE PROTECTION:** Wear chemical safety goggles or a full-plate face shield. Contact lenses should not be worn.

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**SECTION 9. PHYSICAL & CHEMICAL PROPERTIES**

<table>
<thead>
<tr>
<th>Appearance:</th>
<th>Yellow Liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Odor:</td>
<td>Aromatic Characteristic</td>
</tr>
<tr>
<td>Boiling Point:</td>
<td>&gt; 529°F (&gt; 276°C)</td>
</tr>
<tr>
<td>Density at 25°C (gm/cm³):</td>
<td>1.05</td>
</tr>
<tr>
<td>Vapor Pressure:</td>
<td>&gt; 1 @ 20°C (mm Hg)</td>
</tr>
<tr>
<td>Solubility in Water:</td>
<td>Moderately Soluble</td>
</tr>
<tr>
<td>Solubility in Organic Solvents:</td>
<td>Soluble</td>
</tr>
<tr>
<td>pH:</td>
<td>Not Determined</td>
</tr>
<tr>
<td>Flash point, COC (ASTM D-93):</td>
<td>102°F</td>
</tr>
<tr>
<td>Pounds per Gallon:</td>
<td>8.7</td>
</tr>
<tr>
<td>Freeze Point:</td>
<td>10°F (-12.2°C)</td>
</tr>
<tr>
<td>Evaporation Rate:</td>
<td>&lt; 1 (Butyl Alcohol =1)</td>
</tr>
<tr>
<td>Volatiles By Volume @ 68°F (20°C):</td>
<td>Not Determined</td>
</tr>
</tbody>
</table>

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**SECTION 10. STABILITY AND REACTIVITY**

This product is stable and not subject to hazardous polymerization.

**Hazardous Decomposition Products:** Oxides of carbon (carbon monoxide and carbon dioxide), oxides of hydrogen (contaminated and hazardous water), and oxides of Nitrogen can occur when exposed to heat at 350°F (176.7°C).

**Incompatible materials:** Strong oxidizers such as hydrogen peroxide, oxidizing chlorine, and bromine compounds (e.g. chlorine bleach) and chromic acid should be avoided.

**Conditions to avoid:** Extreme heat and sources of fire or ignition.

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**SECTION 11. TOXICOLOGICAL INFORMATION**

**ROUTES OF EXPOSURE:** Eye contact, skin contact, inhalation of vapors, and ingestion.

**ACUTE TOXICITY:** The handling procedures and safety precautions in this SDS should be followed to minimize employee exposure.

**CHRONIC EFFECTS:** Can cause eye, skin and gastrointestinal irritation. Irritation of tissue, defatting of skin, gastrointestinal irritation, Kidney and Liver damage.

**SYMPTOMS:** Irritation of exposed tissue and organs, blurriness of vision, dizziness, fainting, and lack of physical coordination.

**LD50:** Not Established.

**NTP/IARC/OSHA:** This product and none of its components are listed as a carcinogens, mutagens, or teratogens.

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**SECTION 12. ECOLOGICAL INFORMATION**

No specific aquatic data is available. This product should be kept away from all bodies of water, and prevented from entering sewer streams. It may be necessary to extract soil where large spills have occurred. No specific Bioaccumulation data is available. No specific Terrain Migration data is available.
SECTION 13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL: This product should be incinerated as a waste oil, at a certified and registered waste disposal site, in compliance with all federal, state and local regulations and requirements.

RCRA STATUS OF UNUSED PRODUCT: Dispose of this product in permitted hazardous wastes sites. Keep this product away lakes, streams, rivers, ponds, sewer systems, and any other body of water.

SECTION 14. TRANSPORTATION INFORMATION

US DOT Classification:

<table>
<thead>
<tr>
<th>NA 1993 - Not Applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proper Shipping Name:</td>
</tr>
<tr>
<td>Shipping Class:</td>
</tr>
<tr>
<td>Packing Group:</td>
</tr>
<tr>
<td>NMFC Rating:</td>
</tr>
</tbody>
</table>

UN 1993 - Flammable Liquid, NOS (placard required on ground carriers) regardless of container size.

<table>
<thead>
<tr>
<th>Proper Shipping Name: Flammable Liquid, N.O.S.</th>
</tr>
</thead>
<tbody>
<tr>
<td>NMFC Rating: Class 65 (regardless of package or container size)</td>
</tr>
<tr>
<td>Hazard Label: Class 3 (regardless of package or container size)</td>
</tr>
<tr>
<td>Packing Group: III (regardless of package or container size)</td>
</tr>
</tbody>
</table>

IMDG Classification:

This product is not known to be a marine pollutant according to the International Marine Dangerous Goods Codes, however it can cause harm to aquatic life.

WHMIS Label: F152

ICAO Classification:

<table>
<thead>
<tr>
<th>Proper Shipping Name: Flammable Liquid, N.O.S.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class: 3</td>
</tr>
<tr>
<td>UN/NA ID #: UN1993</td>
</tr>
<tr>
<td>Packing Group III</td>
</tr>
</tbody>
</table>

IBC Classification:

Guidance on transporting this product in bulk by ocean freight can be obtained from Annex II of Marpol 73/78 and the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk.

All Transportation Methods:

Keep packages and containers upright and tightly sealed at all time during transportation. Do not expose packages and containers to direct sunlight, extreme heat, or any source of ignition. All product should be transported in their original packaging and containers. Rubber, plastic or other lined containers should not be used.

SECTION 15. REGULATORY INFORMATION

There are no other national and/or regional statutes or information on this product, including OSHA, Department of Transportation, Environmental Protection Agency, Consumer Product Safety Commission, and Right-To-Know Act not previously addressed in this document.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS #</th>
<th>NJ TS Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
This product has not been tested in long term, chronic exposure, therefore, the handling procedures and safety precautions in the SDS should be followed to minimize employee exposure.

**Label Information for the United States:** CAUTION: May cause skin and eye irritation. Do not swallow. Avoid eye and skin contact. Wash thoroughly after handling. Avoid contact with clothing. Wash clothing before reuse. Keep out of reach of children. Keep containers tightly closed when not in use. Avoid breathing mists or sprays of this product or its solutions.

**EMPLOYER RESPONSIBILITY**

Employers must ensure that these Material Safety Data Sheets are readily accessible and available to all their employees responsible for the storage, handling, and manipulation of this product. This can be done in many ways, such as organizing all chemicals SDS in freely available binders kept in areas where the chemicals are stored, or on computers the handling employees have access to without the inconvenience of leaving the work or storage area. We strongly recommend the binder method which keeps them available in the event of a power outage or other emergency inhibiting computer use. Employers may want to consider designating two persons (primary and backup) responsible for obtaining and maintaining SDS records. If the employer does not have a particular SDS for a chemical commodity, the employer or responsible designate should contact the chemical manufacturer to obtain one prior to product use.

**REFERENCES**

OSHA, 29 CR 1910.1200(g) and Appendix D.

**DISCLAIMER**

This brief provides a general overview of the Material Safety Data Sheet requirements as mandated by the Hazard Communication Standard 29 CFR 1910.1200(g) and Appendix D of 29 CFR 1910.1200. It does not alter or determine compliance responsibilities in the standard or the Occupational Safety and Health Act of 1970. Since interpretations and enforcement policy may change over time, the reader should consult current OSHA interpretations, decisions by the Occupational Safety and Heath Review Commission, and the courts for additional guidance on OSHA compliance requirement. Please note that states with OSHA-approved state plans may have additional requirements for chemical safety data sheets, outside of those outlined above. For more information on those standards, please visit: http://www.osha.gov/dcsp/osp/statestandards.html.

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