MATERIAL SAFETY DATA SHEET
Sodium Methylate 30% Solution

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION
Name: Sodium methylate, 30% weight solution in methanol
Use: Catalyst for use in biodiesel production
Company: Excel Biofuels LLC, P.O. Box 146, Clarendon TX 79226
Prepared By: Graham Towerton – (806) 922 3888

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CAS No.</th>
<th>Percent</th>
<th>Hazardous</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methanol</td>
<td>67-65-1</td>
<td>70%</td>
<td>Yes</td>
<td>200 ppm</td>
<td>200 ppm</td>
</tr>
<tr>
<td>Sodium methoxide</td>
<td>124-41-4</td>
<td>30%</td>
<td>Yes</td>
<td></td>
<td>Not established</td>
</tr>
</tbody>
</table>

SECTION 3: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW
Flammable. Reacts violently with water. Toxic by inhalation, in contact with skin and if swallowed. Causes burns. Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed. Moisture sensitive.

POTENTIAL HEALTH EFFECTS

Eye:
Causes eye burns.

Skin:
Causes skin burns. Toxic in contact with skin.

Ingestion:
Poison by ingestion. Causes gastrointestinal tract burns. May cause respiratory failure. May cause vascular collapse and damage. May cause kidney failure. Causes severe digestive tract burns with abdominal pain, vomiting, and possible death. Ingestion can cause blurred vision, narrowing of the visual field, or blindness.

Inhalation:
Causes chemical burns to the respiratory tract. May cause adverse central nervous system effects including headache, convulsions, and possible death. May cause visual impairment and possible permanent blindness. May cause effects similar to those described for ingestion. Inhalation may be fatal as a result of spasm, inflammation, edema of the larynx and bronchi, chemical pneumonitis and pulmonary edema. Toxic if inhaled.

Chronic:
Prolonged or repeated skin contact may cause dermatitis. Chronic inhalation and ingestion may cause effects similar to those of acute inhalation and ingestion.

**SECTION 4: FIRST AID MEASURES**

**Eyes:**
Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

**Skin:**
Get medical aid immediately. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

**Ingestion:**
Do NOT induce vomiting and seek IMMEDIATE MEDICAL ADVICE.

**Inhalation:**
Get medical aid immediately. Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

**SECTION 5: FIRE FIGHTING MEASURES**

**General Information:**
As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Vapors may form an explosive mixture with air. Vapors can travel to a source of ignition and flash back. Will burn if involved in a fire. Water Reactive. Material will react with water and may release a flammable and/or toxic gas. Flammable liquid and vapor.

**Extinguishing Media:**
Use foam, dry chemical, or carbon dioxide. DO NOT USE WATER!

**SECTION 6: ACCIDENTAL RELEASE MEASURES**

**General Information:**
Use proper personal protective equipment as indicated in Section 8.

**Spills/Leaks:**
Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Remove all sources of ignition. Use a spark-proof tool.

**SECTION 7: HANDLING AND STORAGE**

**Handling:**
Use spark-proof tools and explosion proof equipment. Do not breathe dust, vapor, mist, or gas. Do not get in eyes, on skin, or on clothing. Do not allow contact with water. Use only in a chemical fume hood.

**Storage:**
Keep away from sources of ignition. Store in a cool, dry place. Store in a tightly closed container. Flammables-area.

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

**ENGINEERING CONTROLS**
Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

**PERSONAL PROTECTIVE EQUIPMENT**

**Eyes:**
Wear chemical goggles.

**Skin:**
Wear appropriate protective gloves to prevent skin exposure.

**Clothing:**
Wear appropriate protective clothing to minimize contact with skin.

**Respirators:**
Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

### SECTION 9: PHYSICAL/CHEMICAL CHARACTERISTICS

<table>
<thead>
<tr>
<th>Physical State:</th>
<th>Clear liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color:</td>
<td>Colorless - light yellow</td>
</tr>
<tr>
<td>Odor:</td>
<td>Alcohol-like</td>
</tr>
<tr>
<td>pH:</td>
<td>Not available.</td>
</tr>
<tr>
<td>Vapor Pressure:</td>
<td>150hPa @50 deg C</td>
</tr>
<tr>
<td>Viscosity:</td>
<td>Not available.</td>
</tr>
<tr>
<td>Boiling Point:</td>
<td>93 deg C @760mmHg</td>
</tr>
<tr>
<td>Freezing/Melting Point:</td>
<td>1 - 5 deg C</td>
</tr>
<tr>
<td>Autoignition Temperature:</td>
<td>240 deg C (464.00 deg F)</td>
</tr>
<tr>
<td>Flash Point:</td>
<td>33 deg C (91.40 deg F)</td>
</tr>
<tr>
<td>Explosion Limits, lower:</td>
<td>5.5 Vol. %</td>
</tr>
<tr>
<td>Explosion Limits, upper:</td>
<td>44 Vol. %</td>
</tr>
<tr>
<td>Decomposition Temperature:</td>
<td>N/A</td>
</tr>
<tr>
<td>Solubility in water:</td>
<td>Reacts with water</td>
</tr>
<tr>
<td>Specific Gravity/Density:</td>
<td>0.960</td>
</tr>
<tr>
<td>Molecular Formula:</td>
<td>CH3NaO</td>
</tr>
<tr>
<td>Molecular Weight:</td>
<td>54.02</td>
</tr>
</tbody>
</table>

### SECTION 10: STABILITY AND REACTIVITY

**Chemical Stability:**
Stable under normal temperatures and pressures.

**Conditions to Avoid:**
Incompatible materials, light, ignition sources, exposure to moist air or water.

**Incompatibilities with Other Materials:**
Metals, oxidizing agents, acids.

**Hazardous Decomposition Products:**
Carbon monoxide, carbon dioxide, sodium oxide.

**Hazardous Polymerization:**
Has not been reported.
SECTION 11: TOXICOLOGICAL INFORMATION

RTECS#:  CAS# 67-56-1: PC1400000 CAS# 124-41-4: PC3570000

LD50/LC50:
CAS# 67-56-1: Draize test, rabbit, eye: 40 mg Moderate; Draize test, rabbit, eye: 100 mg/24H Moderate;
Draize test, rabbit, skin: 20 mg/24H Moderate; Inhalation, rabbit: LC50 = 81000 mg/m3/14H; Inhalation, rat:
LC50 = 64000 ppm/4H; Oral, mouse: LD50 = 7300 mg/kg; Oral, rabbit: LD50 = 14200 mg/kg; Oral, rat: LD50
= 5600mg/kg; Skin, rabbit: LD50 = 15800 mg/kg. CAS# 124-41-4: Oral, rat: LD50 = 2037 mg/kg. Sodium
methoxide CAS 124-41-4: Skin, rat: LD50 => 2000 mg/kg

Carcinogenicity:
Methanol -Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.
Sodium methoxide -Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.
See actual entry in RTECS for complete information.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity:
Sodium methoxide CAS# 124-41-4: Fish toxicity:LC50 golden ide: 346 mg/L/48H
Methyl alcohol CAS# 67-56-1: Aquatic toxicity rating: TLm96 >1000 ppm. Fish toxicity: Goldfish (fresh water),
Invertebrate toxicity: LC50 brine shrimp 10,000 mg/L/24H (Price, K.S. et al J.-Water Pollut. Control Fed
1974, 46, 1). EC50 Photobacterium phosphoreum 51,000-320, 00 ppm/30min, microtox test (Kaiser,K.L.E.

Other
See "The dictionary of substances and their effects" (editor: M.L. Richardson) for more information.

SECTION 13: DISPOSAL CONSIDERATION

Dispose of in a manner consistent with federal, state, and local regulations.

SECTION 14: TRANSPORT INFORMATION

UN NO: 1289
Hazard Class: 3
Packing Group: III

SECTION 15: REGULATORY INFORMATION

US FEDERAL
TSCA
CAS# 67-56-1 is listed on the TSCA inventory.
CAS# 124-41-4 is listed on the TSCA inventory.
**SECTION 16: OTHER INFORMATION**

**Disclaimer**

This information has been compiled on the basis of our experience and to the best of our knowledge. It is only intended to be of assistance to the user and must not be understood as a guarantee. No responsibility for the losses or damages that may arise through the use of the product is therefore accepted. Nothing should be construed as a recommendation or inducement to infringe any patent.