MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

<table>
<thead>
<tr>
<th>Product code:</th>
<th>S1151</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Name:</td>
<td>Sodium Phenoxide 20% Solution in Methanol</td>
</tr>
<tr>
<td>Chemical Name:</td>
<td>No information available</td>
</tr>
<tr>
<td>Synonyms:</td>
<td>Phenol Sodium Salt, 20% Solution in Methanol</td>
</tr>
<tr>
<td>Recommended use:</td>
<td>No information available.</td>
</tr>
<tr>
<td>CAS #:</td>
<td>Mixture</td>
</tr>
<tr>
<td>Formula:</td>
<td>No information available</td>
</tr>
<tr>
<td>RTECS #:</td>
<td>Not available</td>
</tr>
<tr>
<td>CI#:</td>
<td>Not available</td>
</tr>
<tr>
<td>Supplier:</td>
<td>Spectrum Chemicals and Laboratory Products, Inc.</td>
</tr>
<tr>
<td></td>
<td>14422 South San Pedro St.</td>
</tr>
<tr>
<td></td>
<td>Gardena, CA 90248</td>
</tr>
<tr>
<td></td>
<td>(310) 516-8000</td>
</tr>
<tr>
<td>Emergency Telephone Number:</td>
<td>CHEMTREC: 1-800-424-9300</td>
</tr>
<tr>
<td>Contact Person:</td>
<td>Martin LaBenz (West Coast)</td>
</tr>
<tr>
<td>Contact Person:</td>
<td>Chris Terpak (East Coast)</td>
</tr>
</tbody>
</table>

2. HAZARDS IDENTIFICATION

**EMERGENCY OVERVIEW**

WARNING! Flammable liquid. Can burn with an invisible flame. Irritating to skin. Irritating to eyes. May cause irritation of respiratory tract. Harmful if swallowed. Contains Methyl alcohol which may cause blindness if swallowed.

<table>
<thead>
<tr>
<th>Odor:</th>
<th>No information available</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state:</td>
<td>Liquid.</td>
</tr>
<tr>
<td>Appearance:</td>
<td>No information available</td>
</tr>
<tr>
<td>Color:</td>
<td>Dark red.</td>
</tr>
</tbody>
</table>

OSHA Regulatory Status: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)
2. HAZARDS IDENTIFICATION

POTENTIAL HEALTH EFFECTS

Principal Routes of Exposure:
Ingestion. Inhalation. Skin.

Acute Potential Health Effects:

Skin Contact:
Irritating to skin. It may be absorbed through the skin. If absorbed through the skin it can produce system effects including visual disturbances.

Eye Contact:
Causes eye irritation.

Inhalation:
May cause irritation of respiratory tract. Inhalation of vapors may cause dizziness or suffocation. May cause central nervous system effects. May cause cardiovascular effects. May cause other symptoms similar to those of ingestion.

Ingestion:
May be harmful if swallowed. Ingestion may cause gastrointestinal irritation, nausea, vomiting, and diarrhoea. May cause abdominal pain. May cause constipation. Contains Methyl Alcohol which can affect the eyes and cause significant visual disturbances including blindness. May cause metabolic acidosis. May affect the cardiovascular system. May cause central nervous system effects. May affect the liver. May affect the blood. It may affect the kidneys. Can affect the pancreas. May affect respiration.

Chronic Potential Health Effects:


Carcinogen Status: No information available

Mutagenic Effects: For Methyl Alcohol:
May affect genetic material
Experiments with bacteria and/or yeast have shown mutagenic effects
Animal experiments showed mutagenic effects

Teratogenic Effects: No information available

Aggravated Medical Conditions: No information available

See Section 11 for additional Toxicological Information

POTENTIAL ENVIRONMENTAL EFFECTS

No information available

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methyl Alcohol</td>
<td>87-56-1</td>
<td>80</td>
</tr>
<tr>
<td>Sodium Phenoxide</td>
<td>139-02-6</td>
<td>20</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES
General Advice: Poison information centres in each State capital city can provide additional assistance for scheduled poisons (13 1126). Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. First aider needs to protect himself.

Skin Contact: Wash off immediately with soap and plenty of water. Continue flushing with plenty of water for at least 15 minutes. Remove all contaminated clothes and shoes. Get medical attention.

Eye Contact: Flush eye with water for 15 minutes. Get medical attention.

Inhalation: Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. WARNING! It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled or ingested material is toxic, infectious or corrosive. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Immediate medical attention is required. Call a physician immediately.

Ingestion: Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Immediate medical attention is required. Call a physician or Poison Control Centre immediately.

Notes to Physician: For Methyl Alcohol Ingestion:
1. Support vital functions, correct for dehydration and shock, and manage fluid balance.
2. The currently recommended medical management of Methanol poisoning includes the following methods:
   a. Emptying the stomach by gastric lavage. It is useful if initiated within < 1 of ingestion.
   b. Correct metabolic acidosis with intravenous administration of sodium bicarbonate, adjusting the administration rate according to repeated and frequent measurement of acid/base status.
   c. Administer ethanol (orally or by IV (intravenously)) or Fomepizole (4-methylpyrazole or Antizol) therapy by IV as an antidote to inhibit the formation of toxic metabolites. Adjunct therapy with Leucorvin followed by Folate can also be initialized. Please note that if Ethanol therapy is used, monitor blood glucose, especially in children. Ethanol can cause hypoglycemia.
   d. If patients are diagnosed and treated early in the course with the above methods, hemodialysis may be avoided if fomepizole or ethanol therapy is effective and has corrected the metabolic acidosis, and no renal failure is present. However, once severe acidosis and renal failure occurs, however, hemodialysis is necessary. Hemodialysis is effective in removing Methyl alcohol and toxic metabolites, and correcting metabolic acidosis.

5. FIRE-FIGHTING MEASURES

Flammable Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flashpoint °C/°F</td>
<td>28 °C/82.4 °F</td>
</tr>
<tr>
<td>Tested according to</td>
<td>Closed cup</td>
</tr>
<tr>
<td>Lower Explosion Limit (%)</td>
<td>6.0%</td>
</tr>
<tr>
<td>Upper Explosion Limit (%)</td>
<td>36.5%</td>
</tr>
<tr>
<td>Autoignition Temperature °C/°F</td>
<td>No information available</td>
</tr>
</tbody>
</table>

Product code: S1151       Product name: Sodium Phenoxide 20% Solution in Methanol
Suitable Extinguishing Media: Carbon dioxide (CO2). Dry chemical. Alcohol-resistant foam. Water spray.

Unsuitable Extinguishing Media: Do not use a solid (straight) water stream as it may scatter and spread fire.

Hazardous Combustion Products: Carbon oxides, Sodium oxides

Specific hazards: Flammable. Material may burn with invisible flame. May be ignited by heat, sparks or flames. Vapor may travel considerable distance to source of ignition and flash back. Vapors may form explosive mixtures with air. Most vapors are heavier than air. They will spread along the ground and collect in low or confined areas (sewers, basements, tanks). Container explosion may occur under fire conditions or when heated.

Special Protective Equipment for Firefighters: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

Specific Methods: Water mist may be used to cool closed containers. Move containers from fire area if you can do it without risk. For fires involving tanks or car/trailer load, cool containers with flooding quantities of water until well after the fire is out. Dike fire-control water for later disposal; do not scatter the material.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions:
Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Avoid contact with skin, eyes and clothing. Use personal protective equipment. Remove all sources of ignition. Pay attention to flashback. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use spark-proof tools and explosion-proof equipment. In case of large spill, water spray or vapor suppressing foam may be used to reduce vapors, but may not prevent ignition in closed spaces.

Environmental Precautions:
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Prevent entry into waterways, sewers, basements or confined areas. In case of large spill, dike if needed. Dike far ahead of liquid spill for later disposal.

Methods for Cleaning Up:
Absorb spill with inert material (e.g. vermiculite, dry sand or earth), then place in a suitable chemical waste container. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Handling

Technical Measures/Precautions: Provide sufficient air exchange and/or exhaust in work rooms. Remove all sources of ignition. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. Keep away from incompatible materials.

Product code: S1151  Product name: Sodium Phenoxide 20% Solution in Methanol
Safe Handling Advice:
Wear personal protective equipment. Use only in well-ventilated areas. Avoid contact with skin, eyes and clothing. Keep away from heat and sources of ignition. Do not breathe vapors or spray mist. Do not ingest. When using do not smoke. Handle in accordance with good industrial hygiene and safety practice.

Storage

Technical Measures/Storage Conditions:
Keep container tightly closed in a dry and well-ventilated place. Store at room temperature in the original container. Keep away from heat and sources of ignition. Store in a segregated and approved area. Store away from incompatible materials.

Incompatible Products:

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering measures to reduce exposure:
Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors and mist below their respective threshold limit value.

Personal Protective Equipment

Eye protection: Goggles. Safety glasses with side-shields.
Skin and body protection: Chemical resistant apron. Long sleeved clothing. Gloves.
Respiratory protection: Vapor respirator. Be sure to use an approved/certified respirator or equivalent.
Hygiene measures: Avoid contact with skin, eyes and clothing.

National occupational exposure limits

United States

<table>
<thead>
<tr>
<th>Components</th>
<th>OSHA</th>
<th>NIOSH</th>
<th>ACGIH</th>
<th>AIHA WHEEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methyl Alcohol - 67-56-1</td>
<td>200 ppm TWA</td>
<td>200 ppm TWA</td>
<td>250 ppm STEL</td>
<td>Not determined</td>
</tr>
<tr>
<td></td>
<td>260 mg/m³ TWA</td>
<td>260 mg/m³ TWA</td>
<td>200 ppm TWA</td>
<td></td>
</tr>
<tr>
<td></td>
<td>250 ppm STEL</td>
<td>250 ppm STEL</td>
<td>262 mg/m³ STEL</td>
<td></td>
</tr>
</tbody>
</table>

Canada

<table>
<thead>
<tr>
<th>Components</th>
<th>Alberta</th>
<th>British Columbia</th>
<th>Quebec</th>
<th>Ontario</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methyl Alcohol - 67-56-1</td>
<td>200 ppm TWA</td>
<td>200 ppm TWA</td>
<td>200 ppm TWAEV</td>
<td>200 TWAEV</td>
</tr>
<tr>
<td></td>
<td>262 mg/m³ TWA</td>
<td>250 ppm STEL</td>
<td>262 mg/m³ TWAEV</td>
<td>260 TWAEV</td>
</tr>
<tr>
<td></td>
<td>250 ppm STEL</td>
<td>328 mg/m³ STEL</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Australia and Mexico

<table>
<thead>
<tr>
<th>Components</th>
<th>Australia</th>
<th>Mexico</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methyl Alcohol - 67-56-1</td>
<td>250 ppm STEL</td>
<td>200 ppm TWA</td>
</tr>
<tr>
<td></td>
<td>328 mg/m³ STEL</td>
<td>260 mg/m³ TWA</td>
</tr>
<tr>
<td></td>
<td>200 ppm TWA</td>
<td>250 ppm STEL</td>
</tr>
<tr>
<td></td>
<td>262 mg/m³ STEL</td>
<td>310 mg/m³ STEL</td>
</tr>
</tbody>
</table>

9. PHYSICAL AND CHEMICAL PROPERTIES

Product code: S1151
Product name: Sodium Phenoxide 20% Solution in Methanol
9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid</td>
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<tr>
<td>Odor</td>
<td>No information available</td>
</tr>
<tr>
<td>Taste</td>
<td>No information available</td>
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<tr>
<td>Mass density</td>
<td>No information available</td>
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<tr>
<td>Boiling point</td>
<td>No information available</td>
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<tr>
<td>Appearance</td>
<td>No information available</td>
</tr>
<tr>
<td>Color</td>
<td>Dark red</td>
</tr>
<tr>
<td>Molecular weight</td>
<td>No information available</td>
</tr>
<tr>
<td>Partition coefficient</td>
<td>No information available</td>
</tr>
<tr>
<td>Miscibility</td>
<td>Miscible in water</td>
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<tr>
<td>Solubility</td>
<td>Soluble in Water</td>
</tr>
<tr>
<td>Flash point (°C)</td>
<td>28</td>
</tr>
<tr>
<td>Lower Explosion Limit (%)</td>
<td>6.0%</td>
</tr>
<tr>
<td>Upper Explosion Limit (%)</td>
<td>36.5%</td>
</tr>
<tr>
<td>Autoignition Temperature (°C/F)</td>
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</tr>
<tr>
<td>Melting point (°C/F)</td>
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<td>Vapor density</td>
<td>5.9</td>
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<td>Evaporation rate</td>
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<tr>
<td>Odor threshold (ppm)</td>
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<tr>
<td>Partition coefficient (n-octanol/water)</td>
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<tr>
<td>Specific gravity</td>
<td>0.898</td>
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<tr>
<td>Color</td>
<td>Dark red</td>
</tr>
<tr>
<td>Odor threshold (ppm)</td>
<td>No information available</td>
</tr>
<tr>
<td>VOC content (g/L)</td>
<td>632</td>
</tr>
<tr>
<td>Boiling point (°C)</td>
<td>No information available</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No information available</td>
</tr>
<tr>
<td>Odor threshold (ppm)</td>
<td>No information available</td>
</tr>
<tr>
<td>VOC content (g/L)</td>
<td>632</td>
</tr>
<tr>
<td>Boiling point (°C)</td>
<td>No information available</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No information available</td>
</tr>
<tr>
<td>Odor threshold (ppm)</td>
<td>No information available</td>
</tr>
<tr>
<td>VOC content (g/L)</td>
<td>632</td>
</tr>
<tr>
<td>Boiling point (°C)</td>
<td>No information available</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No information available</td>
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<td>Odor threshold (ppm)</td>
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<td>VOC content (g/L)</td>
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<tr>
<td>Evaporation rate</td>
<td>No information available</td>
</tr>
<tr>
<td>Odor threshold (ppm)</td>
<td>No information available</td>
</tr>
<tr>
<td>VOC content (g/L)</td>
<td>632</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stability</td>
<td>Stable at normal conditions</td>
</tr>
<tr>
<td>Conditions to avoid</td>
<td>Heat. Ignition sources.</td>
</tr>
<tr>
<td>Hazardous decomposition products</td>
<td>Carbon monoxide. Carbon dioxide. Sodium oxides.</td>
</tr>
<tr>
<td>Possibility of Hazardous Reactions</td>
<td>Methyl alcohol can react vigorously with oxidizers. Violent reaction with alkyl aluminum salts, acetyl bromide, chloroform + sodium methoxide, chromic anhydride, cyanuric chloride, lead perchlorate, phosphorous trioxide, nitric acid. Exothermic reaction with sodium hydroxide + chloroform. Incompatible with beryllium dihydride, metals (potassium and magnesium), oxidants (barium perchlorate, bromine, sodium hypochlorite, chlorine, hydrogen peroxide), potassium tert-butoxide, carbon tetrachloride, powdered metals (magnesium or aluminum), metals/alkali metals/alkaline earth metals (aluminum, potassium, sodium, magnesium, zinc), and dichloromethane. Rapid autocatalytic dissolution of aluminum, magnesium or zinc in 9:1 methanol + carbon tetrachloride - sufficiently vigorous to be rated as potentially hazardous. May attack some plastics, rubber, and coatings. Methyl alcohol forms an explosive mixture with air due to its low flash point. Explosive when mixed with Chloroform + sodium methoxide and diethyl zinc. It boils violently and explodes.</td>
</tr>
<tr>
<td>Polymerization</td>
<td>Hazardous polymerisation does not occur</td>
</tr>
<tr>
<td>Corrosivity</td>
<td>No information available</td>
</tr>
</tbody>
</table>

Product code: S1151

Product name: Sodium Phenoxide 20% Solution in Methanol
11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Component Information

*Methyl Alcohol - 67-56-1*

- \( LD_{50}/oral/rat = 5628 \text{ mg/kg} \) Oral LD50 Rat
- \( LD_{50}/oral/mouse = \text{No information available} \)
- \( LD_{50}/dermal/rabbit = 15800 \text{ mg/kg} \) Dermal LD50 Rabbit
- \( LD_{50}/dermal/rat = \text{No information available} \)
- \( LC_{50}/inhalation/rat = 64000 \text{ ppm} \) Inhalation LC50 Rat 4h
- \( = 83.2 \text{ mg/L} \) Inhalation LC50 Rat 4h
- \( LC_{50}/inhalation/mouse = \text{No information available} \)

*Sodium Phenoxide - 139-02-6*

- \( LD_{50}/oral/rat = \text{No information available} \)
- \( LD_{50}/oral/mouse = \text{No information available} \)
- \( LD_{50}/dermal/rabbit = \text{Not determined} \)
- \( LD_{50}/dermal/rat = \text{No information available} \)
- \( LC_{50}/inhalation/rat = \text{No information available} \)
- \( LC_{50}/inhalation/mouse = \text{No information available} \)

Product Information

- \( LC_{50}/inhalation/rat = \text{No information available} \)
- \( LC_{50}/Inhalation/mouse = \text{No information available} \)
- \( LD_{50}/dermal/rabbit = \text{No information available} \)
- \( LD_{50}/dermal/rat = \text{Not information available} \)
- \( LD_{50}/oral/rat = \text{No information available} \)
- \( LD_{50}/oral/mouse = \text{No information available} \)

Local Effects

- **Skin irritation:** Causes skin irritation. Moderate skin irritation.
- **Eye irritation:** Causes eye irritation. Moderate eye irritation.
- **Inhalation:** May cause irritation of respiratory tract. Symptoms may include coughing and wheezing. Exposure to high concentrations may cause headache, nausea, vomiting. May cause pulmonary edema. May cause metabolic acidosis. May cause central nervous system effects, central nervous system depression. May cause cardiovascular system effects. May cause significant visual disturbances (reduced reactivity/and or increased sensitivity to light, blurred vision, double vision, snowy vision) and blindness.
Ingestion:
May be harmful if swallowed. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea. May cause abdominal pain. May cause constipation. May cause pupillary dilation. May cause rapid eye movement. May affect behavior/central nervous system/peripheral nervous system (general anesthetic/sedation, malaise, dizziness, vertigo, delirium, confusion, restlessness, giddiness, back pain, headache, muscle weakness, somnolence, lethargy, spastic paralysis, muscle contraction, tremor, ataxia, seizures/convulsions, unconsciousness, coma). May affect liver. May affect urinary system (kidneys). May cause metabolic acidosis. It may affect the brain. It may affect the pancreas (pancreatitis). May cause hyperglycemia. May affect respiration (respiratory depression, apnea, tachypnea, shortness of breath). May affect respiration (coughing, hyperventilation, pulmonary edema, respiratory failure). May affect the cardiovascular system (tachycardia, bradycardia, hypotension, cardiac failure). May cause significant visual disturbances (reduced reactivity and/or increased sensitivity to light, blurred vision, double vision, snowy vision) and blindness. May affect blood (changes in serum composition, leukocytosis). May affect the blood (blood coagulation time - increased prothrombin and partial thromboplastin times).

Sensitization:
No information available

Chronic Toxicity
Methanol is very slowly eliminated from the body. Because of this slow elimination, Methanol should be regarded as a cumulative poison. Though a single exposure may cause no effect, daily exposures may result in accumulation of harmful amounts. Prolonged or repeated exposure by inhalation or ingestion will have effects similar to those of acute inhalation or ingestion. Prolonged or repeated inhalation may affect metabolism (weight loss). Prolonged or repeated inhalation may affect the brain. Prolonged or repeated ingestion may affect the liver, and kidneys. Prolonged or repeated inhalation may affect the spleen. Prolonged or repeated inhalation may affect the adrenal gland. Prolonged or repeated skin contact may cause dermatitis and defatting, dryness, and cracking of the skin.

Carcinogenic effects:
Not considered carcinogenic

Mutagenic Effects:
For Methyl Alcohol:
May affect genetic material
Experiments with bacteria and/or yeast have shown mutagenic effects
Animal experiments showed mutagenic effects

Reproductive Effects:
For Methyl Alcohol:
May cause adverse reproductive effects based on animal test data
Experiments have shown reproductive toxicity effects on laboratory animals
Expected to cross the placenta
There are no adequate and well-controlled studies in humans. Data in humans were insufficient to evaluate the effects on reproduction

Teratogenic Effects:
No information available

Target Organs:

12. ECOLOGICAL INFORMATION

ECOTOXICITY
Toxicity to terrestrial and aquatic plants and animals: No information available

Product code: S1151
Product name: Sodium Phenoxide 20% Solution in Methanol
Ecotoxicity effects:

Aquatic toxicity:

*Methyl Alcohol - 67-56-1*

**Freshwater Fish Species Data:**
- 13500-17600 mg/L LC50 *Lepomis macrochirus* 96 h flow-through
- 18-20 ml/L LC50 *Oncorhynchus mykiss* 96 h static
- 19500-20700 mg/L LC50 *Oncorhynchus mykiss* 96 h flow-through
- 28200 mg/L LC50 *Pimephales promelas* 96 h flow-through
- 100 mg/L LC50 *Pimephales promelas* 96 h static

**Mobility:**
No information available

**Persistence and degradability:**
Methanol in water is rapidly biodegraded and volatilized. Aquatic hydrolysis, oxidation, photolysis, adsorption to sediment, and bioconcentration are not significant fate processes. The half-life of methanol in surface water ranges from 24 hrs. to 168 hrs.

Based on its vapor pressure, methanol exists almost entirely in the vapor phase in the ambient atmosphere. It is degraded by reaction with photochemically produced hydroxyl radicals and has an estimated half-life of 17.8 days. Methanol is physically removed from air by rain due to its solubility. Methanol can react with NO2 in polluted to form methyl nitrate.

The half-life of methanol in air ranges from 71 hrs. (3 days) to 713 hrs. (29.7 days) based on photooxidation half-life in air.

**Bioaccumulative potential:**
No information available

### 13. DISPOSAL CONSIDERATIONS

**Waste from residues / unused products:**
Waste must be disposed of in accordance with Federal, State and Local regulation.

**Contaminated packaging:**
Empty containers should be taken for local recycling, recovery or waste disposal

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Methyl Alcohol</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>U154 Ignitable waste</td>
</tr>
<tr>
<td>Sodium Phenoxide</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

### 14. TRANSPORT INFORMATION

**DOT**

- **UN-No:** UN1230
- **Proper Shipping Name:** Methanol
- **Hazard Class:** 3
- **Packing Group:** II
- **Subsidiary Risk:** 6.1
- **Marine Pollutant:** No data available
- **ERG No:** 131
- **DOT RQ (lbs):** No information available
- **Symbol(s):** +, I, R5

**TDG (Canada)**

- **Proper Shipping Name:** Methanol
- **UN-No:** UN1230
- **Hazard Class:** 3

**Product code:** S1151  **Product name:** Sodium Phenoxide 20% Solution in Methanol
Packing Group: II
Subsidiary Risk: 6.1
Description: No information available

ADR
Proper Shipping Name: Methanol
UN-No: UN1230
Hazard Class: 3
Packing Group: II
Subsidiary Risk: 6.1
Classification Code: No information available
Description: No information available
CEFIC Tremcard No: No information available

IMO / IMDG
Proper Shipping Name: Methanol
UN-No: UN1230
Hazard Class: 3
Subsidiary Risk: 6.1
Packing Group: II
Description: No information available
IMDG Page: No information available
Marine Pollutant: No information available
EMS: F-E
MFAG: No information available
Maximum Quantity: No information available

RID
Proper Shipping Name: Methanol
UN-No: UN1230
Hazard Class: 3
Packing Group: II
Subsidiary Risk: 3 + 6.1
Classification Code: No information available
Description: No information available

ICAO
UN-No: UN1230
Hazard Class: 3
Proper Shipping Name: Methanol
Packing Group: II
Subsidiary Risk: 6.1
Description: No information available

IATA
Proper Shipping Name: Methanol
UN-No: UN1230
Hazard Class: 3
Packing Group: II
Subsidiary Risk: 6.1
ERG Code: 3P
Description: No information available

15. REGULATORY INFORMATION

International Inventories

Product code: S1151
Product name: Sodium Phenoxide 20% Solution in Methanol
Components | U.S. TSCA | Philippines (PICCS) | KOREA KECL | Japan ENCS | CHINA | Australia (AICS) | EINECS-No. |
--- | --- | --- | --- | --- | --- | --- | --- |
Methyl Alcohol | Present | Present | KE-23193 | 2-201 | Present | Present | 200-659-6 |
Sodium Phenoxide | Present | Present | KE-31576 | (3)-482 | Present | Present | 205-347-3 |

**U.S. Regulations**

**Methyl Alcohol**
- Massachusetts RTK: Present
- New Jersey RTK Hazard Substance: Present
- New Jersey (EHS) List: Present
- New Jersey - Discharge Prevention - List of Hazardous Substances: Present
- Pennsylvania RTK: Environmental hazard
- Pennsylvania RTK - Environmental Hazard List: Present
- RI RTK - Hazardous Substances List: Present
- Minnesota - Hazardous Substance List: Present
- 5000 lb RQ
- 1 lb RQ
- California Directors List of Hazardous Substances: Present

**California Prop. 65: Safe Drinking Water and Toxic Enforcement Act of 1986.**

**Chemicals Known to the State of California to Cause Cancer:**
This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

**Chemicals Known to the State of California to Cause Reproductive Toxicity:**
This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

<table>
<thead>
<tr>
<th>Components</th>
<th>Carcinogen</th>
<th>Developmental Toxicity</th>
<th>Male Reproductive Toxicity</th>
<th>Female Reproductive Toxicity:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methyl Alcohol</td>
<td>Not Listed</td>
<td>Not Listed</td>
<td>Not Listed</td>
<td>Not Listed</td>
</tr>
<tr>
<td>Sodium Phenoxide</td>
<td>Not Listed</td>
<td>Not Listed</td>
<td>Not Listed</td>
<td>Not Listed</td>
</tr>
</tbody>
</table>

**CERCLA/SARA**

<table>
<thead>
<tr>
<th>Components</th>
<th>CERCLA - Hazardous Substances and their Reportable Quantities</th>
<th>Section 302 Extremely Hazardous Substances and TPQs</th>
<th>Section 302 Extremely Hazardous Substances and RQs</th>
<th>Section 313 - Chemical Category</th>
<th>Section 313 - Reporting de minimis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methyl Alcohol</td>
<td>5000 lb final RQ</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>1.0 % de minimis concentration</td>
</tr>
<tr>
<td>Sodium Phenoxide</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

**U.S. TSCA**

<table>
<thead>
<tr>
<th>Components</th>
<th>TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)</th>
<th>TSCA 8(d) -Health and Safety Reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methyl Alcohol</td>
<td>Not Applicable</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Sodium Phenoxide</td>
<td>Not Applicable</td>
<td>Not Applicable</td>
</tr>
</tbody>
</table>

**Canada**

**WHMIS hazard class:**
- B2 Flammable liquid
- D1B Toxic materials
- D2A Very toxic materials
- D2B Toxic materials

**Methyl Alcohol**
- B2 D1B D2A D2B including 28%

**Sodium Phenoxide**
- E

**Product code:** S1151  **Product name:** Sodium Phenoxide 20% Solution in Methanol
Canada Controlled Products Regulation:
This product has been classified according to the hazard criteria of the CPR (Controlled Products Regulation) and the MSDS contains all of the information required by the CPR.

<table>
<thead>
<tr>
<th>Components</th>
<th>WHMIS Ingredient Disclosure List -</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methyl Alcohol</td>
<td>1 %</td>
</tr>
<tr>
<td>Sodium Phenoxide</td>
<td>1 %</td>
</tr>
</tbody>
</table>

Inventory

<table>
<thead>
<tr>
<th>Components</th>
<th>Canada (DSL)</th>
<th>Canada (NDSL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methyl Alcohol</td>
<td>Present</td>
<td>Not Listed</td>
</tr>
<tr>
<td>Sodium Phenoxide</td>
<td>Present</td>
<td>Not Listed</td>
</tr>
</tbody>
</table>

EU Classification

R -phrase(s)
R11 - Highly flammable.
R23/24/25 - Toxic by inhalation, in contact with skin and if swallowed.
R39/23/24/25 - Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.

S -phrase(s)
S 7 - Keep container tightly closed.
S16 - Keep away from sources of ignition - No smoking.
S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
S36/37 - Wear suitable protective clothing and gloves.

The product is classified in accordance with Annex VI to Directive 67/548/EEC

Indication of danger:
F - Highly flammable.
T - Toxic

16. OTHER INFORMATION

The MSDS format complies with ANSI Z400.1-2004 standards.

Preparation Date 28-Sep-2010
Reason for revision: Not applicable
Prepared by: Sonia Owen
Literature reference: No information available

Product code: S1151 Product name: Sodium Phenoxide 20% Solution in Methanol
All chemicals may pose unknown hazards and should be used with caution. This Material Safety Data Sheet (MSDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this MSDS. The physical properties reported in this MSDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this MSDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.

Product code: S1151  
Product name: Sodium Phenoxide 20% Solution in Methanol