Section 1 - Product and Company Information

Product Name                  SODIUM METHYLATE
Product Number                71750
Brand                         FLUKA

Company                      Sigma-Aldrich Canada, Ltd
Address                      2149 Winston Park Drive
                              Oakville ON L6H 6J8 CA
Technical Phone:             9058299500
Fax:                         9058299292
Emergency Phone:             800-424-9300

Section 2 - Composition/Information on Ingredient

Substance Name                          CAS #                 SARA 313
SODIUM METHOXIDE                        124-41-4              No

Formula         CH3ONa
Synonyms        Sodium methoxide
RTECS Number:   PC3570000

Section 3 - Hazards Identification

EMERGENCY OVERVIEW
Pyrophoric (USA) Highly Flammable (EU). Corrosive.
Reacts violently with water. Causes burns.
Target organ(s): Kidneys. Eyes.

HMIS RATING
HEALTH: 3*  FLAMMABILITY: 4  REACTIVITY: 4
SPECIAL HAZARD(S): Water reactive

NFPA RATING
HEALTH: 3  FLAMMABILITY: 4  REACTIVITY: 4
SPECIAL HAZARD(S): Water reactive
*additional chronic hazards present.

For additional information on toxicity, please refer to Section 11.

Section 4 - First Aid Measures

ORAL EXPOSURE
If swallowed, wash out mouth with water provided person is conscious. Call a physician.

INHALATION EXPOSURE
If inhaled, remove to fresh air. If not breathing give
artificial respiration. If breathing is difficult, give oxygen.

DERMAL EXPOSURE
In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. Call a physician.

EYE EXPOSURE
In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

Section 5 - Fire Fighting Measures

FLAMMABLE HAZARDS
Flammable Hazards: Yes
Pyrophoric/Autoignition: Yes

EXPLOSION DATA
Dust Potential: This material, like most materials in powder form, is capable of creating a dust explosion.

CONDITIONS OF FLAMMABILITY
Catches fire if exposed to air.

FLASH POINT
91.4 °F  33 ºC   Method: closed cup

EXPLOSION LIMITS
Lower: 7.3 %   Upper: 36 %

AUTOIGNITION TEMP
455 ºC

FLAMMABILITY
N/A

EXTINGUISHING MEDIA
Suitable: Dry chemical powder.
Unsuitable: Do not use water.

FIREFIGHTING
Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Specific Hazard(s): Flammable solid. Emits toxic fumes under fire conditions.

Section 6 - Accidental Release Measures

PROCEDURE TO BE FOLLOWED IN CASE OF LEAK OR SPILL
Evacuate area. Shut off all sources of ignition. Use nonsparking tools.

PROCEDURE(S) OF PERSONAL PRECAUTION(S)
Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves. Wear disposable coveralls and discard them after use.

METHODS FOR CLEANING UP
Cover with dry-lime, sand, or soda ash. Place in covered containers using non-sparking tools and transport outdoors. Avoid raising dust. Ventilate area and wash spill site after
Section 7 - Handling and Storage

HANDLING
User Exposure: Avoid contact with eyes, skin, and clothing. Avoid breathing dust. Avoid prolonged or repeated exposure.

STORAGE
Suitable: Keep tightly closed. Keep away from heat, sparks, and open flame. Handle and store under nitrogen.
Incompatible Materials: Do not allow contact with water

SPECIAL REQUIREMENTS
Handle and store under inert gas. Air and moisture sensitive.

Section 8 - Exposure Controls / PPE

ENGINEERING CONTROLS
Safety shower and eye bath. Use only in a chemical fume hood. Use nonsparking tools.

PERSONAL PROTECTIVE EQUIPMENT
Respiratory: Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Where risk assessment shows air-purifying respirators are appropriate use a dust mask type N95 (US) or type P1 (EN 143) respirator.
Hand: Long rubber or neoprene gauntlet gloves.
Eye: Chemical safety goggles.
Other: Faceshield (8-inch minimum).

GENERAL HYGIENE MEASURES
Wash thoroughly after handling.

Section 9 - Physical/Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
<th>At Temperature or Pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Physical State: Solid</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Color: White</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Form: Powder</td>
<td></td>
</tr>
<tr>
<td>Molecular Weight</td>
<td>54.02 AMU</td>
<td></td>
</tr>
<tr>
<td>pH</td>
<td>13</td>
<td>20 °C Concentration: 10 g/l</td>
</tr>
<tr>
<td>BP/BP Range</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>MP/MP Range</td>
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<td></td>
</tr>
<tr>
<td>Freezing Point</td>
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<td></td>
</tr>
<tr>
<td>Vapor Density</td>
<td>1.1 g/l</td>
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<tr>
<td>Saturated Vapor Conc.</td>
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<tr>
<td>SG/Density</td>
<td>0.97 g/cm³</td>
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</tr>
<tr>
<td>Bulk Density</td>
<td>0.5 – 0.6 kg/l</td>
<td></td>
</tr>
<tr>
<td>Odor Threshold</td>
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<td></td>
</tr>
<tr>
<td>Volatile%</td>
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<td></td>
</tr>
<tr>
<td>VOC Content</td>
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<td></td>
</tr>
<tr>
<td>Water Content</td>
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<tr>
<td>Solvent Content</td>
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<tr>
<td>Evaporation Rate</td>
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<td></td>
</tr>
<tr>
<td>Viscosity</td>
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<td></td>
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<tr>
<td>Surface Tension</td>
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<td></td>
</tr>
<tr>
<td>Partition Coefficient</td>
<td>N/A</td>
<td></td>
</tr>
</tbody>
</table>

material pickup is complete.
Decomposition Temp.     N/A
Flash Point             91.4 °F 33 °C       Method: closed cup
Explosion Limits        Lower: 7.3 %
                       Upper: 36 %
Flammability            N/A
Autoignition Temp       455 °C
Refractive Index        N/A
Optical Rotation        N/A
Miscellaneous Data      N/A
Solubility              Other Solvents: ALCOHOLS

N/A = not available

Section 10 - Stability and Reactivity

STABILITY
Conditions of Instability: May decompose on exposure to moist air or water.
Conditions to Avoid: Material may decompose violently when exposed to air. Spontaneous ignition may occur when exposed to air at room temperature. May form explosive mixtures with air Heat- and moisture-sensitive.
Materials to Avoid: Acids, Chlorinated solvents, Water.

HAZARDOUS DECOMPOSITION PRODUCTS
Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide.

HAZARDOUS POLYMERIZATION
Hazardous Polymerization: Will not occur

Section 11 - Toxicological Information

ROUTE OF EXPOSURE
Skin Contact: Causes burns.
Skin Absorption: May be harmful if absorbed through the skin.
Eye Contact: Causes burns.
Inhalation: Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract. May be harmful if inhaled.
Ingestion: Harmful if swallowed.

TARGET ORGAN(S) OR SYSTEM(S)
Kidneys. Ears.

SIGNS AND SYMPTOMS OF EXPOSURE
Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin.
Inhalation may result in spasm, inflammation and edema of the larynx and bronchi, chemical pneumonitis, and pulmonary edema.
Symptoms of exposure may include burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, nausea, and vomiting. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

TOXICITY DATA
Oral
800 mg/kg
LD50
Skin
Rat
> 2,000 mg/kg
LD50

Oral
Rat
2037 mg/kg
LD50


IRRITATION DATA
Skin
Rabbit
Remarks: Severe irritation effect

Section 12 - Ecological Information

No data available.

ACUTE ECOTOXICITY TESTS
Test Type: LC50 Fish
Species: Leuciscus idus
Time: 48 h
Value: 346 mg/l

ELIMINATION
Classification: Not significantly biodegradable.

Section 13 - Disposal Considerations

APPROPRIATE METHOD OF DISPOSAL OF SUBSTANCE OR PREPARATION
Contact a licensed professional waste disposal service to dispose of this material. Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Observe all federal, state, and local environmental regulations.

Section 14 - Transport Information

DOT
Proper Shipping Name: Sodium methylate
UN#: 1431
Class: 4.2
Packing Group: Packing Group II
Hazard Label: Spontaneously combustible
Hazard Label: Corrosive
PIH: Not PIH

IATA
Proper Shipping Name: Sodium methylate
IATA UN Number: 1431
Hazard Class: 4.2
Packing Group: II

Section 15 - Regulatory Information

EU DIRECTIVES CLASSIFICATION
Symbol of Danger: F-C
R: 11-14-34
Risk Statements: Highly flammable. Reacts violently with water.
Causes burns.
S: 8-16-26-43-45
Safety Statements: Keep container dry. Keep away from sources of ignition - no smoking. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. In case of fire, use special powder for metal fire. Never use water. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

US CLASSIFICATION AND LABEL TEXT
Risk Statements: Reacts violently with water. Causes burns.
Safety Statements: Keep away from sources of ignition - no smoking. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Take precautionary measures against static discharges. Wear suitable protective clothing, gloves, and eye/face protection.
US Statements: Target organ(s): Kidneys. Eyes.

UNITED STATES REGULATORY INFORMATION
SARA LISTED: No
NOTES: This product is subject to SARA section 313 reporting requirements. This product is subject to SARA section 313 reporting requirements.
TSCA INVENTORY ITEM: Yes

CANADA REGULATORY INFORMATION
WHMIS Classification: This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.
DSL: Yes
NDSL: No

Section 16 - Other Information

DISCLAIMER
For R&D use only. Not for drug, household or other uses.

WARRANTY
The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Inc., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. Copyright 2008 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.