



# SAFETY DATA SHEET

Preparation Date: 3/16/2017

Revision Date: 3/16/2017

Revision Number: G1

## 1. IDENTIFICATION

### Product identifier

**Product code:** S1339  
**Product Name:** SODIUM METHOXIDE, POWDER

### Other means of identification

**Synonyms:** Methanol, sodium salt; Methoxysodium; Methylate de sodium [French]; Metilato sodico [Spanish]; Sodium methanolate; Sodium methylate  
**CAS #:** 124-41-4  
**RTECS #** PC3570000  
**CI#:** Not available

### Recommended use of the chemical and restrictions on use

**Recommended use:** Catalyst. In organic synthesis.  
**Uses advised against** No information available

**Supplier:** Spectrum Chemical Mfg. Corp  
14422 South San Pedro St.  
Gardena, CA 90248  
(310) 516-8000.

**Order Online At:** <https://www.spectrumchemical.com>

**Emergency telephone number** Chemtrec 1-800-424-9300

**Contact Person:** Martin LaBenz (West Coast)

**Contact Person:** Ibad Tirmiz (East Coast)

## 2. HAZARDS IDENTIFICATION

### Classification

This chemical is considered hazardous according to the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Considered a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Acute toxicity - Oral	Category 4
Skin corrosion/irritation	Category 1
Serious eye damage/eye irritation	Category 1
Specific target organ toxicity (single exposure)	Category 3
Flammable solids	Category 1
Self-Heating Substances and Mixtures	Category 1

### Label elements

#### **Danger**

#### **Hazard statements**

Harmful if swallowed  
Causes severe skin burns and eye damage  
May cause respiratory irritation  
Flammable solids

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Self-heating: may catch fire



**Hazards not otherwise classified (HNOC)**

Not Applicable

**Other hazards**

Not available

**Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling  
Do not eat, drink or smoke when using this product  
Do not breathe dust/fume/gas/mist/vapors/spray  
Wear protective gloves/protective clothing/eye protection/face protection  
Use only outdoors or in a well-ventilated area  
Keep away from heat/sparks/open flames/hot surfaces. — No smoking  
Ground/bond container and receiving equipment  
Use explosion-proof electrical/ventilating/lighting/.../equipment  
Keep cool. Protect from sunlight

**Precautionary Statements - Response**

*Immediately call a POISON CENTER or doctor/physician*  
In case of fire: Use dry chemical or CO<sub>2</sub> to extinguish.  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
Immediately call a POISON CENTER or doctor/physician.  
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower  
Wash contaminated clothing before reuse  
IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor/physician. Call a POISON CENTER or doctor/physician if you feel unwell.  
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell  
Rinse mouth  
Do NOT induce vomiting

**Precautionary Statements - Storage**

Store locked up  
Store in a well-ventilated place. Keep container tightly closed  
Maintain air gap between stacks/pallets  
Store bulk masses greater than .?1 kg/ .?2 lbs at temperatures not exceeding .?3 °C/ .?4 °F  
Store away from other materials

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Components	CAS-No.	Weight %
Sodium Methoxide	124-41-4	100

## 4. FIRST AID MEASURES

### First aid measures

<b>General Advice:</b>	National Capital Poison Center in the United States can provide assistance if you have a poison emergency and need to talk to a poison specialist. Call 1-800-222-1222. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. First aider needs to protect himself.
<b>Skin Contact:</b>	Wash off immediately with soap and plenty of water. Remove all contaminated clothes and shoes. Continue flushing with plenty of water for at least 15 minutes. Immediate medical attention is required. Call a physician immediately.
<b>Eye Contact:</b>	Flush eyes with water for 15 minutes. Immediate medical attention is required. Call a physician immediately.
<b>Inhalation:</b>	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.
<b>Ingestion:</b>	Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. If victim is conscious, give water or milk. Immediate medical attention is required. Call a physician or Poison Control Center immediately.

### Most important symptoms and effects, both acute and delayed

<b>Symptoms</b>	Severe skin and eye irritation or burns. Causes digestive (gastrointestinal) tract irritation. Irritating to mouth, throat and stomach. Irritating to respiratory system. May cause build-up of fluid in the lungs (pulmonary edema).
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### Indication of any immediate medical attention and special treatment needed

<b>Notes to Physician:</b>	Treat symptomatically.
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### Protection of first-aiders

First-Aid Providers: Avoid exposure to blood or body fluids. Wear gloves and other necessary protective clothing. Dispose of contaminated clothing and equipment as bio-hazardous waste.

## 5. FIRE-FIGHTING MEASURES

### Extinguishing Media

<b>Suitable Extinguishing Media:</b>	Dry chemical. Carbon dioxide (CO <sub>2</sub> ). Soda Ash. Dry sand. Limestone powder.
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<b>Unsuitable Extinguishing Media:</b>	Water. If it is involved in fire, do not use water on material itself.
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### Specific hazards arising from the chemical

<b>Hazardous Combustion Products:</b>	No information available.
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<b>Specific hazards:</b>	Flammable solid. Produces flammable gases on contact with water. Contact with metals may evolve flammable
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hydrogen gas. May ignite on contact with water or moist air. May react vigorously or explosively on contact with water. May be ignited by heat, sparks or flames.

### **Special Protective Actions for Firefighters**

#### **Specific Methods:**

Do not get water inside containers.

#### **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

## **6. ACCIDENTAL RELEASE MEASURES**

### **Personal precautions, protective equipment and emergency procedures**

#### **Personal Precautions:**

Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Use personal protective equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Remove all sources of ignition. Do not get water inside containers. Do not get water on material itself.

#### **Environmental precautions**

Prevent further leakage or spillage if safe to do so. Do not get water on spilled substance. Do not get water inside the containers. Prevent entry into waterways, sewers, basements or confined areas.

### **Methods and material for containment and cleaning up**

#### **Methods for containment**

Stop leak if you can do it without risk. Cover powder spill with plastic sheet or tarp to minimize spreading.

#### **Methods for cleaning up**

Sweep up and shovel into suitable containers for disposal. Prevent dust cloud. Use only non-sparking tools.

## **7. HANDLING AND STORAGE**

### **Precautions for safe handling**

#### **Technical Measures/Precautions:**

Provide sufficient air exchange and/or exhaust in work rooms. Avoid dust formation. Keep away from incompatible materials. All equipment used when handling the product must be grounded. Remove all sources of ignition.

#### **Safe Handling Advice**

Use only in well-ventilated areas. Avoid contact with skin, eyes and clothing. Wear personal protective equipment. Keep away from sources of ignition - no smoking. Do not breathe dust. Do not ingest. Handle in accordance with good industrial hygiene and safety practice.

### **Conditions for safe storage, including any incompatibilities**

#### **Technical Measures/Storage Conditions:**

Keep container tightly closed in a dry and well-ventilated place. Store at room temperature in the original container. Protect from moisture. Moisture sensitive. Air sensitive. Store under inert gas. Flush with nitrogen. Store in a segregated and approved area. Store away from incompatible materials.

#### **Incompatible Materials:**

Water  
Strong oxidizing agents  
Strong acids  
Chlorinated solvents  
Carbon tetrachloride

1,1,1-Trichloroethane  
Perchloroethylene  
Metals

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

#### National occupational exposure limits

##### United States

Components	CAS-No.	OSHA	NIOSH	ACGIH	AIHA WHEEL
Sodium Methoxide	124-41-4	None	None	None	None

##### Canada

Components	CAS-No.	Canada - Alberta	Canada - British Columbia	Canada - Ontario	Canada - Quebec
Sodium Methoxide	124-41-4	None	None	None	None

##### Australia and Mexico

Components	CAS-No.	Australia	Mexico
Sodium Methoxide	124-41-4	None	None

### Appropriate engineering controls

#### Engineering measures to reduce exposure:

Ensure adequate ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

### Individual protection measures, such as personal protective equipment

#### Personal Protective Equipment

**Eye protection:** Goggles

**Skin and body protection:** Gloves  
Long sleeved clothing  
Chemical resistant apron

**Respiratory protection:** Wear respirator with dust filter.

**Hygiene measures:** Avoid contact with skin, eyes and clothing. When using, do not eat, drink or smoke. Wash hands before breaks and immediately after handling the product.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Physical state:**  
Solid

**Appearance:**  
Powder.

**Color:**  
White.

**Odor:**  
No information available.

**Taste**  
No information available.

**Formula:**  
CH<sub>3</sub>ONa

<b>Molecular/Formula weight:</b> 54.03 g/mol	<b>Flammability:</b> No information available	<b>Flashpoint (°C/°F):</b> No information available.
<b>Flash Point Tested according to:</b> Not available	<b>Autoignition Temperature (°C/°F):</b> No information available	<b>Lower Explosion Limit (%):</b> No information available
<b>Upper Explosion Limit (%):</b> No information available	<b>Melting point/range(°C/°F):</b> No information available	<b>Decomposition temperature(°C/°F):</b> >126 °C/>260 °F
<b>Boiling point/range(°C/°F):</b> No information available	<b>Bulk density:</b> No information available	<b>Density (g/cm3):</b> No information available
<b>Specific gravity:</b> No information available	<b>pH:</b> No information available	<b>Vapor pressure @ 20°C (kPa):</b> No information available
<b>Evaporation rate:</b> No information available	<b>Vapor density:</b> No information available	<b>VOC content (g/L):</b> No information available
<b>Odor threshold (ppm):</b> No information available	<b>Partition coefficient (n-octanol/water):</b> No information available	<b>Viscosity:</b> No information available
<b>Miscibility:</b> No information available	<b>Solubility:</b> Reacts with water Soluble in Methanol Soluble in Ethanol Insoluble in hydrocarbons	

## 10. STABILITY AND REACTIVITY

### Reactivity

Rapidly disintegrates in water to produce corrosive sodium hydroxide and flammable methanol  
May react vigorously or explosively on contact with water  
Sodium Methylate will decompose and ignite on exposure to moist air or water  
Reacts with most metals to produce flammable Hydrogen gas.

### Chemical stability

**Stability:** Moisture Sensitive. Sensitive to air. Stable under recommended storage conditions.

**Possibility of Hazardous Reactions:** Hazardous polymerization does not occur

**Conditions to avoid:** Heat. Ignition sources. Exposure to water. Exposure to moisture. Exposure to moist air. Exposure to air. Incompatible materials.

**Incompatible Materials:** Water  
Strong oxidizing agents  
Strong acids  
Chlorinated solvents  
Carbon tetrachloride  
1,1,1-Trichloroethane  
Perchloroethylene  
Metals

**Hazardous decomposition products:** When heated to decomposition it emits toxic fumes. Sodium oxides.

### Other Information

**Corrosivity:** No information available

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**Special Remarks on Corrosivity:** No information available

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

**Principal Routes of Exposure:**

Ingestion. Inhalation. Skin. Eyes.

### Acute Toxicity

#### Component Information

Sodium Methoxide	
CAS-No.	124-41-4

**LD50/oral/rat** = 2037 mg/kg Oral LD50 Rat (RTECS and LOLI)  
1687-1844 mg/kg (ECHA)

**LD50/oral/mouse** = No information available

**LD50/dermal/rabbit** = No information available

**LD50/dermal/rat** = >2000mg/kg Dermal LD50 Rat

**LC50/inhalation/rat** = No information available

**LC50/inhalation/mouse** = No information available

**Other LD50 or LC50information** = No information available

#### Product Information

**LD50/oral/rat =**

**VALUE- Acute Tox Oral** = 1687 mg/kg

**LD50/oral/mouse =**

**Value - Acute Tox Oral** = No information available

**LD50/dermal/rabbit**

**VALUE-Acute Tox Dermal** = No information available

**LD50/dermal/rat**

**VALUE -Acute Tox Dermal** = >2000 mg/kg

**LC50/inhalation/rat**

**VALUE-Vapor** = No information available

**VALUE-Gas** = No information available

**VALUE-Dust/Mist** = No information available

**LC50/Inhalation/mouse**

**VALUE-Vapor** = No information available

**VALUE - Gas** = No information available

**VALUE - Dust/Mist** = No information available

### Symptoms

**Skin Contact:** Severe skin irritation. Causes burns.

**Eye Contact:** Severe eye irritation. Causes eye burns.

**Inhalation** Irritating to respiratory system. It may cause pulmonary edema.

**Ingestion** Harmful if swallowed. Irritating to mouth, throat and stomach.

**Aspiration hazard** No information available.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Chronic Toxicity** No information available.

**Sensitization:** No information available.

**Mutagenic Effects:** No information available

**Carcinogenic effects:** Not considered carcinogenic.

Components	CAS-No.	IARC	ACGIH - Carcinogens	NTP	OSHA HCS - Carcinogens	Australia - Notifiable Carcinogenic Substances	Australia - Prohibited Carcinogenic Substances
Sodium Methoxide	124-41-4	Not listed	Not listed	Not listed	Not listed	Not listed	Not listed

*ACGIH (American Conference of Governmental Industrial Hygienists)*

*IARC (International Agency for Research on Cancer)*

*NTP (National Toxicology Program)*

*OSHA (Occupational Safety and Health Administration of the US Department of Labor)*

**Reproductive toxicity** No data is available

**Reproductive Effects:** No information available

**Developmental Effects:** No information available

**Teratogenic Effects:** No information available

**Specific Target Organ Toxicity**

**STOT - single exposure** No information available.

**STOT - repeated exposure** No information available.

**Target Organs:** No information available.

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

**Ecotoxicity effects:** No data available.

**Persistence and degradability:** No information available

**Bioaccumulative potential:** No information available.

**Mobility:** No information available.

## 13. DISPOSAL CONSIDERATIONS

**Disposal Methods**

**Waste from residues / unused products:**

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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

Components	CAS-No.	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
Sodium Methoxide	124-41-4	None	None	None	None

#### 14. TRANSPORT INFORMATION

**DOT**

**UN-No:** UN1431  
**Proper Shipping Name:** Sodium methylate  
**Hazard Class:** 4.2  
**Subsidiary Class:** 8  
**Packing group:** II  
**Emergency Response Guide Number:** 138  
**Marine Pollutant:** No data available  
**DOT RQ (lbs):** No information available  
**Special Provisions:** A7, A19, IB5, IP2, T3, TP33  
**Symbol(s):** No information available  
**Description:** UN1431, Sodium methylate, 4.2 (8), II

**TDG (Canada)**

**UN-No:** UN1431  
**Proper Shipping Name:** Sodium methylate  
**Hazard Class:** 4.2  
**Subsidiary Risk:** No information available  
**Packing Group:** II  
**Marine Pollutant:** No Information available  
**Description:** UN1431, Sodium methylate, 4.2 (8), II

**ADR**

**UN-No:** UN1431  
**Proper Shipping Name:** Sodium methylate  
**Hazard Class:** 4.2  
**Packing Group:** II  
**Subsidiary Risk:** No information available  
**Description:** UN1431, Sodium methylate, 4.2 (8), II

**IMO / IMDG**

**UN-No:** UN1431  
**Proper Shipping Name:** Sodium methylate  
**Hazard Class:** 4.2  
**Subsidiary Risk:** No information available  
**Packing Group:** II  
**Marine Pollutant:** No information available  
**EMS:** F-A  
**Description:** UN1431, Sodium methylate, 4.2 (8), II

**RID**

**UN-No:** UN1431  
**Proper Shipping Name:** Sodium methylate  
**Hazard Class:** 4.2  
**Subsidiary Risk:** No information available  
**Packing Group:** II

**Description:** UN1431, Sodium methylete, 4.2 (8), II

**ICAO**

**UN-No:** UN1431  
**Proper Shipping Name:** Sodium methylete  
**Hazard Class:** 4.2  
**Subsidiary Risk:** No information available  
**Packing Group:** II  
**Description:** UN1431, Sodium methylete, 4.2 (8), II

**IATA**

**UN-No:** UN1431  
**Proper Shipping Name:** Sodium methylete  
**Hazard Class:** 4.2  
**Subsidiary Risk:** No information available  
**Packing Group:** II  
**ERG Code:** 4C  
**Special Provisions** No information available  
**Description:** UN1431, Sodium methylete, 4.2 (8), II

**15. REGULATORY INFORMATION**

**International Inventories**

Components	CAS-No.	U.S. TSCA	KOREA KECL	Philippines (PICCS)	Japan ENCS	CHINA	Australia (AICS)	EINECS-No.
Sodium Methoxide	124-41-4	Present	Present KE-23196	Present	Present (2)-203	Present	Present	Present 204-699-5

**U.S. Regulations**

*Sodium Methoxide*

**Massachusetts RTK:** Present  
**New Jersey RTK Hazardous Substance List:** 1709  
**New Jersey - Discharge Prevention - List of Hazardous Substances:** Present  
**Pennsylvania RTK:** Environmental hazard  
**Pennsylvania RTK - Environmental Hazard List** Present  
**New York Release Reporting - List of Hazardous Substances:**  
1000 lb RQ  
100 lb RQ  
**Louisiana Reportable Quantity List for Pollutants:** 1000lbfinal RQ  
454kgfinal 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)

Components	CAS-No.	Carcinogen	Developmental Toxicity	Male Reproductive Toxicity	Female Reproductive Toxicity:
Sodium Methoxide	124-41-4	Not Listed	Not Listed	Not Listed	Not Listed

**CERCLA/SARA**

Components	CAS-No.	CERCLA - Hazardous Substances and	Section 302 Extremely Hazardous	Section 302 Extremely Hazardous	Section 313 - Chemical Category	Section 313 - Reporting de minimis

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		their Reportable Quantities	Substances and TPQs	Substances and RQs		
Sodium Methoxide	124-41-4	1000 lb final RQ 454 kg final RQ	None	None	None	None

#### U.S. TSCA

Components	CAS-No.	TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)	TSCA 8(d) -Health and Safety Reporting
Sodium Methoxide	124-41-4	Not Applicable	Not Applicable

#### Canada

#### WHMIS hazard class:

B6 Reactive flammable material

E Corrosive material

#### Components

Sodium Methoxide

#### WHIMHAZ

B6 E

#### 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.

#### Inventory

Components	CAS-No.	Canada (DSL)	Canada (NDSL)
Sodium Methoxide	124-41-4	Present	Not Listed

Components	CAS-No.	CEPA Schedule I - Toxic Substances
Sodium Methoxide	124-41-4	Not listed
Components	CAS-No.	CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting
Sodium Methoxide	124-41-4	Not listed

#### EU Classification

##### R-phrase(s)

R11 - Highly flammable.

R14 - Reacts violently with water.

R34 - Causes burns.

##### S -phrase(s)

S 8 - Keep container dry.

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

S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S43 - In case of fire, use dry chemical. Never use water

S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

S 1/2 - Keep locked up and out of the reach of children.

Components	CAS-No.	Classification	Concentration Limits:	Safety Phrases
Sodium Methoxide	124-41-4	F; R11 R14 C; R34	No information	S1/2 S8 S16 S26 S43 S45

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

#### Indication of danger:

F - Highly flammable.

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C - Corrosive.



## 16. OTHER INFORMATION

Preparation Date: 3/16/2017  
Revision Date: 3/16/2017  
Prepared by: Sonia Owen

**Disclaimer:**

All chemicals may pose unknown hazards and should be used with caution. This Safety Data Sheet (SDS) 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 SDS. The physical properties reported in this SDS 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 SDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.

**End of Safety Data Sheet**