



Fisher Scientific

Part of Thermo Fisher Scientific

SAFETY DATA SHEET

Creation Date 29-May-2013

Revision Date 02-Feb-2015

Revision Number 1

1. Identification

Product Name Sodium Methoxide (Laboratory)

Cat No. : S335-100

Synonyms Sodium methylate

Recommended Use Laboratory chemicals.

Uses advised against No Information available

Details of the supplier of the safety data sheet

Company

Fisher Scientific
One Reagent Lane
Fair Lawn, NJ 07410
Tel: (201) 796-7100

Emergency Telephone Number

CHEMTREC®, Inside the USA: 800-424-9300
CHEMTREC®, Outside the USA: 001-703-527-3887

2. Hazard(s) identification

Classification

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

Flammable solids	Category 1
Self-heating substances and mixtures	Category 1
Corrosive to metals	Category 1
Acute oral toxicity	Category 4
Skin Corrosion/irritation	Category 1
Serious Eye Damage/Eye Irritation	Category 1
Specific target organ toxicity (single exposure)	Category 3
Target Organs - Respiratory system.	

Label Elements

Signal Word

Danger

Hazard Statements

Flammable solid
Self-heating; may catch fire
May be corrosive to metals
Harmful if swallowed
Causes severe skin burns and eye damage
Causes serious eye damage
May cause damage to organs through prolonged or repeated exposure

**Precautionary Statements****Prevention**

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

Response

Call a POISON CENTER or doctor/physician if you feel unwell

Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Skin

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower
 Immediately call a POISON CENTER or doctor/physician
 Wash contaminated clothing before reuse

Eyes

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

Ingestion

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
 Rinse mouth
 Do NOT induce vomiting

Fire

Evacuate area
 Fight fire with normal precautions from a reasonable distance
 In case of fire: Evacuate area

Storage

Store locked up
 Maintain air gap between stacks/pallets
 Do not expose to temperatures exceeding 50 °C/122 °F
 Store away from other materials
 Store in corrosive resistant polypropylene container with a resistant inliner
 Store in a well-ventilated place. Keep container tightly closed

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Reacts violently with water
 May form combustible dust concentrations in air

3. Composition / information on ingredients

Component	CAS-No	Weight %
Sodium methoxide	124-41-4	95
Sodium hydroxide	1310-73-2	< 2
Sodium carbonate	497-19-8	< 2

4. First-aid measures

Eye Contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Immediate medical attention is required.
Skin Contact	Wash off immediately with plenty of water for at least 15 minutes. Immediate medical attention is required.
Inhalation	Move to fresh air. If breathing is difficult, give oxygen. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with a respiratory medical device. Immediate medical attention is required.
Ingestion	Do not induce vomiting. Call a physician or Poison Control Center immediately.
Most important symptoms/effects	Causes burns by all exposure routes. Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation
Notes to Physician	Treat symptomatically

5. Fire-fighting measures

Suitable Extinguishing Media	Dry chemical, soda ash, lime or sand.
Unsuitable Extinguishing Media	DO NOT USE WATER, FOAM OR CO ₂
Flash Point	No information available
Method -	No information available
Autoignition Temperature	70 °C / 158 °F
Explosion Limits	
Upper	36.0 vol %
Lower	7.3 vol %
Sensitivity to Mechanical Impact	No information available
Sensitivity to Static Discharge	No information available

Specific Hazards Arising from the Chemical

Flammable. Corrosive Material. Reacts violently with water. Risk of ignition. Dust can form an explosive mixture in air. Containers may explode when heated. Thermal decomposition can lead to release of irritating gases and vapors. Keep product and empty container away from heat and sources of ignition.

Hazardous Combustion Products

Carbon monoxide (CO) Carbon dioxide (CO₂) Sodium oxides

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA

Health	Flammability	Instability	Physical hazards
3	3	2	W

6. Accidental release measures

Personal Precautions	Use personal protective equipment. Evacuate personnel to safe areas. Remove all sources of ignition. Avoid dust formation. Take precautionary measures against static discharges. Ensure adequate ventilation. Do not get in eyes, on skin, or on clothing.
Environmental Precautions	Avoid release to the environment. See Section 12 for additional ecological information.
Methods for Containment and Clean Up	Remove all sources of ignition. Do not expose spill to water. Sweep up or vacuum up spillage and collect in suitable container for disposal. Avoid dust formation. Use spark-proof

tools and explosion-proof equipment.

7. Handling and storage

Handling Use only under a chemical fume hood. Wear personal protective equipment. Do not breathe vapors/dust. Do not get in eyes, on skin, or on clothing. Do not ingest. Use spark-proof tools and explosion-proof equipment. Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharges. Do not allow contact with water.

Storage Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat and sources of ignition. Keep away from water. Keep under nitrogen. Flammables area.

8. Exposure controls / personal protection

Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH
Sodium hydroxide	Ceiling: 2 mg/m ³	(Vacated) Ceiling: 2 mg/m ³ TWA: 2 mg/m ³	IDLH: 10 mg/m ³ Ceiling: 2 mg/m ³

Component	Quebec	Mexico OEL (TWA)	Ontario TWAEV
Sodium hydroxide	Ceiling: 2 mg/m ³	Ceiling: 2 mg/m ³	CEV: 2 mg/m ³

Legend

ACGIH - American Conference of Governmental Industrial Hygienists

OSHA - Occupational Safety and Health Administration

NIOSH IDLH: The National Institute for Occupational Safety and Health Immediately Dangerous to Life or Health

Engineering Measures Use only under a chemical fume hood. Use explosion-proof electrical/ventilating/lighting/equipment. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal Protective Equipment

Eye/face Protection Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin and body protection Wear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory Protection Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Physical State	Powder Solid
Appearance	Light yellow
Odor	Odorless
Odor Threshold	No information available
pH	13 (@ 20) 5g/l aq.sol. (20°C)
Melting Point/Range	126 °C / 258.8 °F
Boiling Point/Range	No information available
Flash Point	No information available
Evaporation Rate	Not applicable
Flammability (solid,gas)	No information available
Flammability or explosive limits	
Upper	36.0 vol %

Lower	7.3 vol %
Vapor Pressure	50 mmHg @ 20 °C
Vapor Density	Not applicable
Relative Density	No information available
Solubility	No information available
Partition coefficient; n-octanol/water	No data available
Autoignition Temperature	70 °C / 158 °F
Decomposition Temperature	No information available
Viscosity	Not applicable
Molecular Formula	C H3 Na O
Molecular Weight	54.02

10. Stability and reactivity

Reactive Hazard	Yes
Stability	Water reactive. Moisture sensitive. Air sensitive.
Conditions to Avoid	Temperatures above 65°C. Keep away from open flames, hot surfaces and sources of ignition. Exposure to air. Incompatible products. Exposure to moist air or water.
Incompatible Materials	Acids, Strong oxidizing agents, Metals
Hazardous Decomposition Products	Carbon monoxide (CO), Carbon dioxide (CO ₂), Sodium oxides
Hazardous Polymerization	Hazardous polymerization does not occur.
Hazardous Reactions	Reacts violently with water.

11. Toxicological information

Acute Toxicity

Product Information

Oral LD50 Category 4. ATE = 300 - 2000 mg/kg.

Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Sodium methoxide	1687 mg/kg (Rat)	>2000 mg/kg (Rat)	Not listed
Sodium hydroxide	Not listed	1350 mg/kg (Rabbit)	Not listed
Sodium carbonate	2800 mg/kg (Rat)	> 2000 mg/kg (rabbit)	2.3 mg/l 2h (Rat)

Toxicologically Synergistic Products No information available

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

Irritation	Causes burns by all exposure routes
Sensitization	No information available
Carcinogenicity	The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico
Sodium methoxide	124-41-4	Not listed				
Sodium hydroxide	1310-73-2	Not listed				
Sodium carbonate	497-19-8	Not listed				

Mutagenic Effects No information available

Reproductive Effects No information available.

Developmental Effects No information available.

Teratogenicity No information available.

STOT - single exposure	Respiratory system
STOT - repeated exposure	None known
Aspiration hazard	No information available
Symptoms / effects, both acute and delayed	Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation
Endocrine Disruptor Information	No information available
Other Adverse Effects	See actual entry in RTECS for complete information.

12. Ecological information

Ecotoxicity

This product contains the following substance(s) which are hazardous for the environment.

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Sodium methoxide	Not listed	346 mg/L LC50 48 h	Not listed	Not listed
Sodium hydroxide	-	45.4 mg/L LC50 96 h	-	-
Sodium carbonate	242 mg/L EC50 = 120 h	Lepomis macrochirus: LC50: 300 mg/L/96h Gambusia affinis: LC50: 740 mg/L/96h	-	265 mg/L EC50 = 48 h

Persistence and Degradability Reacts violently with water Persistence is unlikely based on information available.
Bioaccumulation/ Accumulation No information available.

Mobility Is not likely mobile in the environment.

Component	log Pow
Sodium methoxide	-0.75

13. Disposal considerations

Waste Disposal Methods Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

14. Transport information

DOT

UN-No	UN1431
Proper Shipping Name	SODIUM METHYLATE
Hazard Class	4.2
Subsidiary Hazard Class	8
Packing Group	II

TDG

UN-No	UN1431
Proper Shipping Name	SODIUM METHYLATE
Hazard Class	4.2
Subsidiary Hazard Class	8
Packing Group	II

IATA

UN-No	UN1431
Proper Shipping Name	SODIUM METHYLATE
Hazard Class	4.2
Subsidiary Hazard Class	8
Packing Group	II

IMDG/IMO

UN-No	UN1431
Proper Shipping Name	SODIUM METHYLATE

Hazard Class 4.2
 Subsidiary Hazard Class 8
 Packing Group II

15. Regulatory information

International Inventories

Component	TSCA	DSL	NDSL	EINECS	ELINCS	NLP	PICCS	ENCS	AICS	IECSC	KECL
Sodium methoxide	X	X	-	204-699-5	-		X	X	X	X	X
Sodium hydroxide	X	X	-	215-185-5	-		X	X	X	X	X
Sodium carbonate	X	X	-	207-838-8	-		X	X	X	X	X

Legend:

X - Listed

E - Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.

F - Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.

N - Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.

P - Indicates a commenced PMN substance

R - Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.

S - Indicates a substance that is identified in a proposed or final Significant New Use Rule

T - Indicates a substance that is the subject of a Section 4 test rule under TSCA.

XU - Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B)).

Y1 - Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.

Y2 - Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

U.S. Federal Regulations

TSCA 12(b) Not applicable

SARA 313 Not applicable

SARA 311/312 Hazardous Categorization

Acute Health Hazard	Yes
Chronic Health Hazard	Yes
Fire Hazard	Yes
Sudden Release of Pressure Hazard	No
Reactive Hazard	Yes

Clean Water Act

Component	CWA - Hazardous Substances	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants
Sodium methoxide	X	1000 lb	-	-
Sodium hydroxide	X	1000 lb	-	-

Clean Air Act Not applicable

OSHA Occupational Safety and Health Administration
 Not applicable

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Component	Hazardous Substances RQs	CERCLA EHS RQs
Sodium methoxide	1000 lb	-
Sodium hydroxide	1000 lb	-

California Proposition 65 This product does not contain any Proposition 65 chemicals

State Right-to-Know

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Sodium methoxide	X	X	X	-	-
Sodium hydroxide	X	X	X	-	X

U.S. Department of Transportation

Reportable Quantity (RQ): N
 DOT Marine Pollutant N
 DOT Severe Marine Pollutant N

U.S. Department of Homeland Security

This product does not contain any DHS chemicals.

Other International Regulations

Mexico - Grade No information available

Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR

WHMIS Hazard Class

- B6 Reactive flammable material
- D1B Toxic materials
- E Corrosive material
- F Dangerously reactive material
- B4 Flammable solid
- D2B Toxic materials



16. Other information

Prepared By Regulatory Affairs
 Thermo Fisher Scientific
 Email: EMSDS.RA@thermofisher.com

Creation Date 29-May-2013

Revision Date 02-Feb-2015

Print Date 02-Feb-2015

Revision Summary This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS)

Disclaimer

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of SDS