# SAFETY DATA SHEET SPECTRUM®



Revision date 08-August-2022

**Revision Number** 2

## 1. Identification

**Product identifier** 

Product Name SODIUM METHOXIDE, 0.5 M METHANOLIC SOLUTION, REAGENT, ACS

Other means of identification

Product Code(s) S1600

UN/ID no UN1289

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended use No information available

Restrictions on use No information available

Details of the supplier of the safety data sheet

**Supplier Address** 

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

Emergency telephone number

Emergency Telephone Chemtrec 1-800-424-9300

# 2. Hazard(s) identification

#### Classification

Acute toxicity - Oral	Category 3
Acute toxicity - Dermal	Category 3
Acute toxicity - Inhalation (Gases)	Category 3
Acute toxicity - Inhalation (Vapors)	Category 3
Acute toxicity - Inhalation (Dusts/Mists)	Category 3
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Reproductive toxicity	Category 2
Specific target organ toxicity (single exposure)	Category 1
Specific target organ toxicity (repeated exposure)	Category 1
Flammable liquids	Category 2

## Hazards not otherwise classified (HNOC)

Not applicable

#### Label elements

#### Danger

#### Hazard statements

Toxic if swallowed

Toxic in contact with skin

Toxic if inhaled

Causes skin irritation

Causes serious eye irritation

Suspected of damaging fertility or the unborn child

Causes damage to organs

Causes damage to organs through prolonged or repeated exposure

Highly flammable liquid and vapor



Appearance Clear Physical state Liquid Odor Alcohol

#### **Precautionary Statements - Prevention**

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Wear protective gloves/protective clothing/eye protection/face protection

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Use only outdoors or in a well-ventilated area

Do not breathe dust/fume/gas/mist/vapors/spray

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

Keep container tightly closed

Ground/bond container and receiving equipment

Use explosion-proof electrical/ventilating/lighting/.?/equipment

Use only non-sparking tools

Take precautionary measures against static discharge

Keep cool

#### **Precautionary Statements - Response**

Specific treatment (see .? on this label)

IF exposed: Call a POISON CENTER or doctor

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

If eye irritation persists: Get medical advice/attention Call a POISON CENTER or doctor if you feel unwell

If skin irritation occurs: Get medical advice/attention

IF ON SKIN (or hair): 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

Call a POISON CENTER or doctor

IF SWALLOWED: Immediately call a POISON CENTER or doctor

Rinse mouth

In case of fire: Use CO2, dry chemical, or foam to extinguish

#### **Precautionary Statements - Storage**

Store locked up.

Store in a well-ventilated place. Keep container tightly closed

## **Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

#### **Unknown acute toxicity**

#### Other information

Can burn with an invisible flame. May cause blindness if swallowed.

# 3. Composition/information on ingredients

#### **Substance**

Not applicable.

#### Mixture

Chemical name	CAS No	Weight-%	Trade secret
Methyl Alcohol	67-56-1	80 - 100	*
Sodium Methoxide	124-41-4	3 - <5	*

<sup>\*</sup>The exact percentage (concentration) of composition has been withheld as a trade secret.

## 4. First-aid measures

#### **Description of first aid measures**

**General advice** Show this safety data sheet to the doctor in attendance. Immediate medical attention is

required.

**Inhalation** Remove to fresh air. Get medical attention immediately if symptoms occur. IF exposed or

concerned: Get medical advice/attention. If breathing has stopped, give artificial respiration. Get medical attention immediately. Immediate medical attention is required. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory

medical device. If breathing is difficult, (trained personnel should) give oxygen.

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep

eye wide open while rinsing. Do not rub affected area. Remove contact lenses, if present

and easy to do. Continue rinsing. Get immediate medical advice/attention.

Skin contact Wash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes. Get immediate medical advice/attention.

**Ingestion** Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth

to an unconscious person. Do NOT induce vomiting. Get immediate medical

advice/attention.

**Self-protection of the first aider** Remove all sources of ignition. Ensure that medical personnel are aware of the material(s)

involved, take precautions to protect themselves and prevent spread of contamination. Use personal protective equipment as required. See section 8 for more information. Avoid contact with skin, eyes or clothing. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Do not breathe vapor or mist.

Most important symptoms and effects, both acute and delayed

**Symptoms** May cause redness and tearing of the eyes. Burning sensation. Coughing and/ or

wheezing. Difficulty in breathing.

Indication of any immediate medical attention and special treatment needed

**Note to physicians** Treat symptomatically.

# 5. Fire-fighting measures

Suitable Extinguishing Media Large Fire Dry chemical. Carbon dioxide (CO2). water spray. Alcohol resistant foam. CAUTION: Use of water spray when fighting fire may be inefficient.

**Unsuitable extinguishing media**Do not scatter spilled material with high pressure water streams.

Specific hazards arising from the

chemical

risk of ignition. Keep product and empty container away from heat and sources of ignition. In the event of fire, cool tanks with water spray. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

**Explosion data** 

Personal precautions

Sensitivity to mechanical impact none.

Sensitivity to static discharge yes.

Special protective equipment for fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

## 6. Accidental release measures

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

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Evacuate personnel to safe areas. Use personal protective equipment as required. See section 8 for more information. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Keep people away from and upwind of spill/leak. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Pay attention to flashback. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Do not touch or walk through spilled material. Do not breathe

vapor or mist.

Other information Ventilate the area. Refer to protective measures listed in Sections 7 and 8.

## Methods and material for containment and cleaning up

Methods for containment Stop leak if you can do it without risk. Do not touch or walk through spilled material. A vapor

suppressing foam may be used to reduce vapors. Dike far ahead of spill to collect runoff water. Keep out of drains, sewers, ditches and waterways. Absorb with earth, sand or other

non-combustible material and transfer to containers for later disposal.

Methods for cleaning up Take precautionary measures against static discharges. Dam up. Soak up with inert

absorbent material. Pick up and transfer to properly labeled containers.

# 7. Handling and storage

#### Precautions for safe handling

Advice on safe handling

Use personal protection equipment. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use grounding and bonding connection when transferring this material to prevent static discharge, fire or explosion. Use spark-proof tools and explosion-proof equipment. Keep in an area equipped with sprinklers. Use according to package label instructions. Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Take off contaminated clothing and wash before reuse. Do not eat, drink or smoke when using this product. Remove contaminated clothing and shoes. Do not breathe vapor or mist. In case of insufficient ventilation, wear suitable respiratory equipment. Handle product only in closed system or provide appropriate exhaust ventilation.

# Conditions for safe storage, including any incompatibilities

**Storage Conditions** 

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep in properly labeled containers. Do not store near combustible materials. Keep in an area equipped with sprinklers. Store in accordance with the particular national regulations. Store in accordance with local regulations. Protect from moisture. Store locked

## 8. Exposure controls/personal protection

#### Control parameters

**Exposure Limits** The following ingredients are the only ingredients of the product above the cut-off level (or

level that contributes to the hazard classification of the mixture) which have an exposure limit applicable in the region for which this safety data sheet is intended or other

recommended limit. At this time, the other relevant constituents have no known exposure

limits from the sources listed here.

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Methyl Alcohol	No data available	200 ppm TWA	-
67-56-1		260 mg/m³ TWA	

#### Appropriate engineering controls

Engineering controls Showers

Eyewash stations Ventilation systems.

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

**Eye/face protection** Tight sealing safety goggles.

**Hand protection** Wear suitable gloves. Impervious gloves.

**Skin and body protection** Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron.

Antistatic boots.

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are

exceeded or irritation is experienced, ventilation and evacuation may be required.

General hygiene considerations Do not eat, drink or smoke when using this product. Contaminated work clothing should not

be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. Wear suitable gloves and eye/face protection. Avoid contact with skin, eyes or clothing. Remove and wash contaminated clothing and gloves, including the inside, before re-use.

Do not breathe vapor or mist.

# 9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state Liquid
Appearance Clear
Color Colorless
Odor Alcohol

Odor threshold No information available

<u>Property</u> <u>Values</u> <u>Remarks • Method</u>

no data available Hq None known Melting point / freezing point no data available None known > 60 °C / 140 °F Boiling point / boiling range None known Flash point 11 °C / 51.8 °F CC (closed cup) **Evaporation rate** no data available None known Flammability (solid, gas) None known no data available Flammability Limit in Air None known

Upper flammability or explosive 37%

limits

Lower flammability or explosive 6%

limits

Vapor pressure 13 None known no data available Vapor density None known 8.0 None known Relative density None known Water solubility Miscible in water Solubility(ies) Miscible with many organic solvents None known Partition coefficient No data available None known no data available Autoignition temperature None known None known **Decomposition temperature** 

Kinematic viscosity

no data available

None known

No data available

None known

Other information

Explosive properties
Oxidizing properties
No information available

# 10. Stability and reactivity

**Reactivity** No information available.

Chemical stability Stable under normal conditions.

Possibility of hazardous reactions None under normal processing.

Conditions to avoid Heat, flames and sparks. Exposure to air or moisture over prolonged periods. Excessive

heat.

**Incompatible materials** Oxidizing agent. Strong acids. Strong bases.

Hazardous decomposition products None known based on information supplied.

## 11. Toxicological information

#### Information on likely routes of exposure

Product Information .

**Inhalation** Specific test data for the substance or mixture is not available. May cause irritation of

respiratory tract. Toxic by inhalation. (based on components).

**Eye contact** Specific test data for the substance or mixture is not available. Irritating to eyes. (based on

components). Causes serious eye irritation.

**Skin contact** Specific test data for the substance or mixture is not available. Causes skin irritation. (based

on components). Toxic in contact with skin.

**Ingestion** Specific test data for the substance or mixture is not available. Ingestion may cause

gastrointestinal irritation, nausea, vomiting and diarrhea. Toxic if swallowed. (based on

components).

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Redness. May cause redness and tearing of the eyes. Coughing and/ or wheezing.

Difficulty in breathing.

Acute toxicity

#### **Numerical measures of toxicity**

The following values are calculated based on chapter 3.1 of the GHS document .

#### Unknown acute toxicity

**Component Information** 

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Methyl Alcohol 67-56-1	5628 mg/kg (Rat)	15800 mg/kg (Rabbit)	83.2 mg/L (Rat) 4 h
Sodium Methoxide 124-41-4	= 2037 mg/kg (Rat)	> 2000 mg/kg (Rat)	-

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

**Skin corrosion/irritation**Classification based on data available for ingredients. Irritating to skin.

Serious eye damage/eye irritation Classification based on data available for ingredients. Causes serious eye irritation.

Respiratory or skin sensitization
Germ cell mutagenicity
Carcinogenicity

No information available.
No information available.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Reproductive toxicity Contains a known or suspected reproductive toxin. Classification based on data available

for ingredients. Suspected of damaging fertility or the unborn child.

STOT - single exposure Based on the classification criteria of the Globally Harmonized System as adopted in the

country or region with which this safety data sheet complies, this product has been determined to cause systemic target organ toxicity from acute exposure. (STOT SE). Causes damage to organs if swallowed. Causes damage to organs in contact with skin.

Causes damage to organs if inhaled.

STOT - repeated exposure

Target organ effects

Causes damage to organs through prolonged or repeated exposure.

respiratory system, Eyes, Skin, central nervous system, Gastrointestinal tract (GI).

**Aspiration hazard** No information available.

Other adverse effects No information available.

Interactive effects No information available.

# 12. Ecological information

Ecotoxicity

Chemical name	Algae/aquatic plants	Fish	Toxicity to	Crustacea
			microorganisms	
Methyl Alcohol	-	LC50: 13500 -	-	-
67-56-1		17600mg/L (96h,		
		Lepomis macrochirus)		
		LC50: 18 - 20mL/L (96h,		
		Oncorhynchus mykiss)		
		LC50: 19500 -		
		20700mg/L (96h,		
		Oncorhynchus mykiss)		
		LC50: =28200mg/L (96h,		
		Pimephales promelas)		
		LC50: >100mg/L (96h,		
		Pimephales promelas)		
Sodium Methoxide	-	LC50: =346mg/L (48h,	-	-
124-41-4		Leuciscus idus)		

Persistence and degradability Bioaccumulation

No information available. Inherently biodegradable.

**Component Information** 

Chemical name	Partition coefficient
Methyl Alcohol	-0.77
67-56-1	

Other adverse effects N

No information available.

# 13. Disposal considerations

#### Waste treatment methods

Waste from residues/unused

products

Should not be released into the environment. Dispose of in accordance with local

regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging Empty containers pose a potential fire and explosion hazard. Do not cut, puncture of weld

containers.

## 14. Transport information

#### DOT

UN/ID no UN1289

Proper Shipping Name: Sodium methylate solutions

Hazard class
Subsidiary Class
Packing group:

Special Provisions IB2, T7, TP1, TP8
Marine Pollutant Severe Marine Pollutant

**Description:** UN1289, Sodium methylate solutions, 3 (8), II

132

**Emergency Response Guide** 

Number

#### **TDG**

**UN-No:** UN1289

Proper Shipping Name: Sodium methylate solution

Hazard class 3
Subsidiary Class 8
Packing Group: ||

**Description:** UN1289, Sodium methylate solution, 3 (8), II

#### MEX

**UN-No** UN1289

Proper Shipping Name Sodium methylate solution

Hazard class 3 Subsidiary Class 8 Packing Group II

**Description** UN1289, Sodium methylate solution, 3 (8), II

## ICAO (air)

**UN-No:** UN1289

**Proper Shipping Name:** Sodium methylate solution

Hazard class 3
Subsidiary hazard class 8
Packing Group: II
Special Provisions A3

**Description:** UN1289, Sodium methylate solution, 3 (8), II

## <u>IATA</u>

UN number UN1289

**Proper Shipping Name:** Sodium methylate solution

Transport hazard class(es) 3
Subsidiary hazard class 8
Packing group ||

ERG Code 3C Special Provisions A3, A803

**Description:** UN1289, Sodium methylate solution, 3 (8), II

**IMDG** 

UN number UN1289

Proper shipping name Sodium methylate solution

Transport hazard class(es) 3
Subsidiary hazard class 8
Packing group II
EmS-No F-E, S-C
Marine pollutant NP1

**Description** UN1289, Sodium methylate solution, 3 (8), II, (11°C c.c.)

RID

UN number UN1289

Proper Shipping Name: SODIUM METHYLATE SOLUTION

Transport hazard class(es) 3
Packing group || Classification code || FC

Description: UN1289, SODIUM METHYLATE SOLUTION, 3 (8), II

Labels 3+8

<u>ADR</u>

UN number UN1289

Proper Shipping Name: Sodium methylate solution

Transport hazard class(es) 3
Subsidiary hazard class 8
Packing group II
Classification code FC
Tunnel restriction code (D/E)

**Description:** UN1289, Sodium methylate solution, 3 (8), II, (D/E)

Labels 3+8

<u>ADN</u>

UN/ID No UN1289

Proper shipping name Sodium methylate solution

Transport hazard class(es) 3
Packing Group || Classification code | FC

**Description** UN1289, Sodium methylate solution, 3 (+ 8), II

Hazard label(s) 3+8
Limited quantity (LQ) 1 L
ventilation VE01

**Equipment Requirements** PP, EP, EX, A

# 15. Regulatory information

#### International Inventories

**TSCA** Complies

DSL/NDSL Complies EINECS/ELINCS Complies

**ENCS** This product complies with ENCS: **IECSC** This product complies with China:

KECL Complies PICCS Complies

AICS All the constituents of this material are listed on the Australian Inventory of Chemical

Substances (AICS).

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

**IECSC** - China Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

## **US Federal Regulations**

#### **SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Chemical name	SARA 313 - Threshold Values %
Methyl Alcohol - 67-56-1	1.0

## SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

#### **CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

#### **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).

Chemical name	Hazardous Substances RQs	Extremely Hazardous Substances RQs
Methyl Alcohol	5000 lb final RQ	-
67-56-1	2270 kg final RQ	
Sodium Methoxide	1000 lb final RQ	-
124-41-4	454 kg final RQ	

#### **US State Regulations**

#### **California Proposition 65**

This product contains the following Proposition 65 chemicals:.

Chemical name	California Proposition 65	
Methyl Alcohol - 67-56-1	developmental toxicity	

#### U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Methyl Alcohol 67-56-1	1222	Present	Environmental hazard
Sodium Methoxide 124-41-4	1709	Present	Environmental hazard

## U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

## 16. Other information

#### NFPA

Health hazards 3 Flammability 3

Instability 0

Physical and chemical properties -

**HMIS** 

Health hazards 3 \*
Flammability 3
Physical hazards 0
Personal protection X

Chronic Hazard Star Legend

\* = Chronic Health Hazard

#### Key or legend to abbreviations and acronyms used in the safety data sheet

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA TWA (time-weighted average) STEL STEL (Short Term Exposure Limit)

Ceiling Maximum limit value

#### Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR) U.S. Environmental Protection Agency ChemView Database

European Food Safety Authority (EFSA) EPA (Environmental Protection Agency) Acute Exposure Guideline Level(s) (AEGL(s))

U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act

U.S. Environmental Protection Agency High Production Volume Chemicals

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

Japan GHS Classification

Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

NIOSH (National Institute for Occupational Safety and Health)

National Library of Medicine's ChemID Plus (NLM CIP)

National Library of Medicine's PubMed database (NLM PUBMED)

National Toxicology Program (NTP)

New Zealand's Chemical Classification and Information Database (CCID)

Organization for Economic Co-operation and Development Environment, Health, and Safety Publications Organization for Economic Co-operation and Development High Production Volume Chemicals Program

Organization for Economic Co-operation and Development Screening Information Data Set

World Health Organization

Revision date 08-August-2022 Revision Note 08-August-2022 No information available.

**Disclaimer** 

The information provided in 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text.

**End of Safety Data Sheet**