



Preparing for the New Era of Laboratories

# MATERIAL SAFETY DATA SHEET (MSDS)

According to regulation (EU) no.1907/2006

## **SODIUM METHOXIDE 98% Extrapure**

PRODUCT CODE : O-5195  
CAS No : 124-41-4  
FORMULA :  $\text{NaOCH}_3$   
UN No : 1431

# MATERIAL SAFETY DATA SHEET (SDS/MSDS)

## SODIUM METHOXIDE 98% Extrapure



MSDS Number : 0348

Date : October 18<sup>th</sup>, 2024

Version : 1.0

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

- 1.1 Product Name** : SODIUM METHOXIDE 98% Extrapure  
**Synonyms** : Sodium methylate  
**CAS No.** : 124-41-4  
**HS Code** : 2905 4900  
**Chemical Formula** : NaOCH<sub>3</sub>  
**Molecular Weight** : 54,02 g/mol  
**Product Code** : O-5195  
**Brand** : Labotiq
- 1.2 Manufacturer** : Labotiq  
**Address** : Jl.Terapi Raya AD2-Bumi Menteng Asri Bogor, Jawa Barat Indonesia – 16111  
**Website** : [www.labotiq.net](http://www.labotiq.net)  
**Email** : [labotiq.id@gmail.com](mailto:labotiq.id@gmail.com)  
**For information** : Phone : (+62-251) 839110, 8311662, Fax : (+62-251) 83135710  
**Emergency number** : +6281316894650
- 1.3 Application** : Laboratory chemicals, Manufacture of substances, General Chemical reagent

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

##### Classification according to Regulation (EC) No 1272/2008

Flammable solids, (Category 1)	H228: Flammable solid.
Self-heating substances and mixtures, (Category 1)	H251: Self-heating; may catch fire.
Corrosive to Metals, (Category 1)	H290: May be corrosive to metals.
Acute toxicity, (Category 4)	H302: Harmful if swallowed.
Skin corrosion, (Sub-category 1A)	H314: Causes severe skin burns and eye damage

#### 2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram



Signal word

Danger

Hazard statement(s)

H228	Flammable solid.
H251	Self-heating; may catch fire.
H290	May be corrosive to metals.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.

Precautionary statement(s)

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P235	Keep cool.
P260	Do not breathe dust.
P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.

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P303 + P361 + P353

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.

P305 + P351 + P338

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

Supplemental Hazard Statements  
EUH014

Reacts violently with water.

**Reduced Labeling (<= 125 ml)**

Pictogram



Signal Word

Danger

Hazard Statements

H251

Self-heating; may catch fire.

H314

Causes severe skin burns and eye damage.

Precautionary Statements

P235

Keep cool.

P260

Do not breathe dust.

P280

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

P303 + P361 + P353

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.

P305 + P351 + P338

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

Supplemental Hazard information (EU)

EUH014

Reacts violently with water.

**2.3 Other hazards**

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Ecological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Toxicological information:

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

### SECTION 3: Composition/information on ingredients

**3.1 Substances**

Synonyms : Sodium methylate  
Formula : NaOCH<sub>3</sub>

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Molecular weight : 54,02 g/mol  
 CAS-No. : 124-41-4  
 EC-No. : 204-699-5  
 Index-No. : 603-040-00-2

### 3.2 Mixture

#### Hazardous ingredients according to Regulation (EC) No 1272/2008

Component	Classification	Concentration
Sodium methylate CAS-No. 124-41-4 EC-No. 204-699-5 Index-No. 603-040-00-2	Flam. Sol. 1; Self-heat. 1; Met. Corr. 1; Acute Tox. 4; Skin Corr. 1A; H228, H251, H290, H302, H314	<= 100 %

For the full text of the H-Statements mentioned in this Section, see Section 16.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

#### General advice

First aiders need to protect themselves. Show this material safety data sheet to the doctor in attendance.

#### If inhaled

After inhalation: fresh air. Call in physician.

#### In case of skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Call a physician immediately.

#### In case of eye contact

After eye contact: rinse out with plenty of water. Immediately call in ophthalmologist. Remove contact lenses.

#### If swallowed

After swallowing: make victim drink water (two glasses at most), avoid vomiting (risk of perforation). Call a physician immediately. Do not attempt to neutralise.

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

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

### 4.3 Indication of any immediate medical attention and special treatment needed

No data available

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

#### Suitable extinguishing media

Carbon dioxide (CO2) Dry powder

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### **Unsuitable extinguishing media**

Foam Water

### **5.2 Special hazards arising from the substance or mixture**

Carbon oxides, Sodium oxides, Combustible. Vapors are heavier than air and may spread along floors. May not get in touch with: Water  
Development of hazardous combustion gases or vapours possible in the event of fire.

### **5.3 Advice for firefighters**

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

### **5.4 Further information**

Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

## **SECTION 6: Accidental release measures**

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

Advice for non-emergency personnel: Avoid inhalation of dusts. Avoid substance contact. Ensure adequate ventilation. Keep away from heat and sources of ignition. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8.

### **6.2 Environmental precautions**

Do not let product enter drains. Risk of explosion.

### **6.3 Methods and materials for containment and cleaning up**

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

### **6.4 Reference to other sections**

For disposal see section 13.

## **SECTION 7: Handling and storage**

### **7.1 Precautions for safe handling**

#### **Advice on safe handling**

Keep workplace dry. Do not allow product to come into contact with water.

#### **Advice on protection against fire and explosion**

Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharge.

#### **Hygiene measures**

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance. For precautions see section 2.2.

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

#### **Storage conditions**

No metal containers. Tightly closed. Keep away from heat and sources of ignition. Never allow product to get in contact with water during storage. Moisture sensitive. Store under inert gas.

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### Storage class

Storage class (TRGS 510): 4.2: Pyrophoric and self-heating hazardous materials

### 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### Ingredients with workplace control parameters

#### Derived No Effect Level (DNEL)

Application Area	Routes of exposure	Health effect	Value
No data available			

#### Predicted No Effect Concentration (PNEC)

Compartment	Value
Fresh water	154 mg/l
Sea water	15,4 mg/l
Aquatic intermittent release	1540 mg/l
Fresh water sediment	570,4 mg/kg
Sea sediment	57,04 mg/kg
Soil	23,5 mg/kg

### 8.2 Exposure control

#### Appropriat engineering controls

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product

#### Personal protective equipment

##### Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Tightly fitting safety goggles

##### Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

##### Full contact

Material: Nitrile rubber  
 Minimum layer thickness: 0,11 mm  
 Break through time: 480 min  
 Material tested: KCL 741 Dermatril® L

##### Splash contact

Material: Nitrile rubber  
 Minimum layer thickness: 0,11 mm  
 Break through time: 480 min

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Material tested: KCL 741 Dermatril® L

### Body Protection

Flame retardant antistatic protective clothing.

### Respiratory protection

required when dusts are generated. Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

Recommended Filter type: Filter type P2

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

### Control of environmental exposure

Do not let product enter drains. Risk of explosion.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Appearance	powder
Color	white
Odour	odorless
Odour Threshold	No data available
pH	12,8 at 10 g/l at 20 °C
Melting point/freezingpoint	Melting point/range: > 350 °C at ca.1.013,25 hPa – OECD Test Guideline 102 - Decomposes on heating.
Initial boiling point and boiling range	> 350 °C at ca.1.013,25 hPa – OECD Test Guideline 103 - Decomposes on heating.
Flash point	33 °C - closed cup
Evaporation rate	No data available
Flammability (solid, gas)	The substance or mixture is a flammable solid with the category 1. - Flammability (solids)
Upper/lower flammability or explosive limits	Upper explosion limit: 36 %(V) Lower explosion limit: 7,3 %(V)
Vapour pressure	67 hPa at 20 °C 130 hPa at 25 °C
Vapour density	No data available
Density	1,300 g/cm <sup>3</sup> at 20 °C
Relative density	No data available
Water solubility	No data available
Partition coefficient: noctanol/water	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	Viscosity, kinematic: No data available Viscosity, dynamic: No data available
Explosive properties	No data available
Oxidizing properties	none

### 9.2 Other safety information

Solubility in other solvents	Alcohol – soluble
Relative vapor density	1,87 - (Air = 1.0)

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**SECTION 10: Stability and reactivity**

**10.1 Reactivity**

Self-heating; may catch fire. The following applies in general to flammable organic substances and mixtures: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed. Reacts violently with water.

**10.2 Chemical stability**

sensitive to moisture

**10.3 Possibility of hazardous reactions**

can decompose violently in contact with:

Water

Risk of ignition or formation of inflammable gases or vapours with:

Aluminum, Zinc, Acids

Exothermic reaction with:

Oxidizing agents

Risk of explosion with:

Methanol with Chloroform

**10.4 Conditions to avoid**

Moisture.

**10.5 Incompatible materials**

No data available

**10.6 Hazardous decomposition products**

In the event of fire: see section 5

**SECTION 11: Toxicological information**

**11.1 Information on toxicological effects**

**Acute toxicity**

LD50 Oral - Rat - male and female - 1.687 mg/kg (OECD Test Guideline 401)

Inhalation: No data available

LD50 Dermal - Rat - male and female - > 2.000 mg/kg

Remarks: (ECHA)

**Skin corrosion/irritation**

Skin - Rabbit

Result: Causes severe burns. - 4 h

(US-EPA)

Remarks: (Regulation (EC) No 1272/2008, Annex VI)

**Serious eye damage/eye irritation**

Eyes - Rabbit

Result: Corrosive to eyes - 24 h

Remarks: (ECHA)

Remarks: Causes serious eye damage.

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**Respiratory or skin sensitisation**

No data available

**Germ cell mutagenicity**

No data available

**Carcinogenicity**

No data available

**Reproductive toxicity**

No data available

**Specific target organ toxicity - single exposure**

No data available

**Specific target organ toxicity - repeated exposure**

No data available

**Aspiration hazard**

May be fatal if swallowed and enters airways

**Additional Information****Product:**

Assessment :

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher. burning sensation, Cough, wheezing, laryngitis, Shortness of breath, spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema, Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

**SECTION 12: Ecological information****12.1 Toxicity**

Toxicity to fish

flow-through test LC50 - Lepomis macrochirus (Bluegill) - 15.400 mg/l - 96 h (US-EPA)

Remarks: Methanol

Toxicity to daphnia and other aquatic invertebrates

static test EC50 - Daphnia magna (Water flea) - &gt; 10.000 mg/l - 48 h (DIN 38412)

Remarks: Methanol EC5 - E.sulcatum - &gt; 10.000 mg/l - 72 h

Remarks: (Lit.)

Toxicity to algae

static test ErC50 - Pseudokirchneriella subcapitata - ca. 22.000 mg/l - 96 h  
(OECD Test Guideline 201)

Remarks: Methanol

Toxicity to bacteria

static test IC50 - activated sludge - &gt; 1.000 mg/l - 3 h (OECD Test Guideline 209)

Remarks: Methanol

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**12.2 Persistence and degradability**

Biodegradability aerobic - Exposure time 20 d

Result: 95 % - Readily biodegradable.

Remarks: Methanol

**12.3 Bioaccumulative potential**

No data available

**12.4 Mobility in soil**

No data available

**12.5 Results of PBT and vPvB assessment**

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

**12.6 Other adverse effects**

No data available

**Endocrine disrupting properties****Product:**

Assessment :

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

**SECTION 13: Disposal considerations****13.1 Waste treatment methods**

No data available

**SECTION 14: Transport information****14.1 UN number**

ADR/RID: 1431

IMDG: 1431

IATA: 1431

**14.2 UN proper shipping name**

ADR/RID: SODIUM METHYLATE

IMDG: SODIUM METHYLATE

IATA: Sodium methylate

**14.3 Transport hazard class(es)**

ADR/RID: 4.2 (8)

IMDG: 4.2 (8)

IATA: 4.2 (8)

**14.4 Packaging group**

ADR/RID: II

IMDG: II

IATA: II

**14.5 Environmental hazards**

ADR/RID: no

IMDG Marine pollutant: no

IATA: no

**14.6 Special precautions for user****Further information**

No data available

**SECTION 15: Regulatory information**

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**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

**National legislation**

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

01 OTHER HAZARDS

**Other regulations**

Observe work restrictions regarding maternity protection in accordance to Dir 92/85/EEC or stricter national regulations where applicable. Take note of Dir 94/33/EC on the protection of young people at work.

**15.2 Chemical safety assessment**

A Chemical Safety Assessment has been carried out for this substance

**SECTION 16: Other information****Full text of H-Statements referred to under sections 2 and 3.**

H228	Flammable solid.
H251	Self-heating; may catch fire.
H290	May be corrosive to metals.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
EUH014	Reacts violently with water.

**National Fire Protection Association (U.S.A.):**

Health: 3

Flammability: 3

Reactivity: 2

**Further information**

*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. Labotiq shall not be held liable for any damage resulting from handling or from contact with the above product.*

Version : 1.0

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