

Safety Data Sheet AKS760 Date of issue: 06/02/2015 Version: 1.0

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

#### **Product identifier**

Product form : Substance Physical state : Solid

Substance name : SODIUM METHOXIDE, 95%

Product code : AKS760 Formula : CH3NaO

: SODIUM METHYLATE; METHANOL, SODIUM SALT Synonyms

: METAL ALCOHOLATE Chemical family

#### Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Chemical intermediate

For research and industrial use only

#### Details of the supplier of the safety data sheet

#### GELEST, INC.

11 East Steel Road Morrisville, PA 19067

USA

T 215-547-1015 - F 215-547-2484 - (M-F): 8:00 AM - 5:30 PM EST

info@gelest.com - www.gelest.com

#### **Emergency telephone number**

**Emergency number** : CHEMTREC: 1-800-424-9300 (USA); +1 703-527-3887 (International)

#### **SECTION 2: Hazards identification**

#### Classification of the substance or mixture

#### Classification (GHS-US)

Self-heat. 1 H251 Skin Corr. 1B H314 Eye Dam. 1 H318

Full text of H-phrases: see section 16

#### 2.2. Label elements

#### **GHS-US** labeling

Hazard pictograms (GHS-US)





GHS02

GHS05

Signal word (GHS-US)

H251 - Self-heating: may catch fire Hazard statements (GHS-US)

H314 - Causes severe skin burns and eye damage

H318 - Causes serious eye damage

Precautionary statements (GHS-US) : P280 - Wear protective gloves/protective clothing/eye protection/face protection

P235+P410 - Keep cool. Protect from sunlight

P260 - Do not breathe dust

P264 - Wash hands thoroughly after handling

P301+P330+P331 - If swallowed: rinse mouth. Do NOT induce vomiting

P303+P361+P353 - If on skin (or hair): take off immediately all contaminated clothing. rinse

skin with water/shower

P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing

P310 - Immediately call a doctor

P363 - Wash contaminated clothing before reuse

P405 - Store locked up

P407 - Maintain air gap between stacks/pallets

P420 - Store away from other materials

P501 - Dispose of contents/container to licensed waste disposal facility.

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#### 2.3. Other hazards

No additional information available

#### Unknown acute toxicity (GHS US)

No data available

#### **SECTION 3: Composition/information on ingredients**

#### **Substance**

Substance type Mono-constituent

SODIUM METHOXIDE, 95% Name

CAS No 124-41-4 : 204-699-5 EC no FC index no 603-040-00-2

Name	Product identifier	%	Classification (GHS-US)
Sodium methylate	(CAS No) 124-41-4	> 95	Self-heat. 1, H251 Skin Corr. 1B, H314 Eye Dam. 1, H318
Methanol	(CAS No) 67-56-1		Flam. Liq. 2, H225 Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation:vapour), H331 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 1, H370 STOT SE 3, H336

#### **Mixture** 3.2.

Not applicable

#### **SECTION 4: First aid measures**

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

First-aid measures general

Remove contaminated clothing and shoes. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). If possible show this sheet; if not available show packaging or label.

First-aid measures after inhalation

Remove victim to fresh air and keep at rest in a position comfortable for breathing. If you feel unwell, seek medical advice.

First-aid measures after skin contact

Wash with plenty of soap and water. Get immediate medical advice/attention.

First-aid measures after eye contact

Immediately flush eyes thoroughly with water for at least 15 minutes. Remove contact lenses, if

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

First-aid measures after ingestion : Never give anything by mouth to an unconscious person. Get medical advice/attention.

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

Symptoms/injuries : Causes severe skin burns and eye damage. Symptoms/injuries after inhalation : Inhalation will cause sneezing, irritation and burns.

Symptoms/injuries after skin contact : Causes (severe) skin burns. Worker will notice a slippery feeling on washing. May be harmful in

contact with skin.

Symptoms/injuries after eye contact : Causes serious eye damage. Symptoms/injuries after ingestion : May be harmful if swallowed.

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

No additional information available

#### **SECTION 5: Firefighting measures**

#### **Extinguishing media**

Suitable extinguishing media : Fires should be extinguished with dry sand, starting from the edge and working inwards.

Unsuitable extinguishing media : In no case should water be used.

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

Fire hazard : Self-heating: may catch fire. Irritating fumes and caustic vapors may develop when material is

exposed to elevated temperatures or open flame.

Explosion hazard SODIUM METHOXIDE CAN IGNITE SPONTANEOUSLY IF EXPOSED TO MOIST AIR AT

TEMPERATURES GREATER THAN 70°C (158°F).

#### 5.3. Advice for firefighters

Firefighting instructions : Protect against caustic dust, smoke and water. Exercise caution when fighting any chemical fire.

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Protection during firefighting

Do not enter fire area without proper protective equipment, including respiratory protection. Wear pressure demand self-contained breathing apparatus with full facepiece and full protective clothing. Avoid contact with skin and eyes. Do not breathe dust.

#### SECTION 6: Accidental release measures

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

General measures : Eliminate every possible source of ignition. Use special care to avoid static electric charges.

6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

Emergency procedures : Ventilate area.

#### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.

#### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Sweep or shovel spills into appropriate container for disposal. Use only non-sparking tools.

#### 6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

#### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Precautions for safe handling : Avoid contact with skin and eyes. Do not breathe dust. Provide local exhaust or general room

ventilation to minimize exposure to dust. Avoid dust formation. Use only in well ventilated

areas.

Hygiene measures : Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling.

Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed

out of the workplace.

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

Storage conditions : Keep container tightly closed. Store under dry nitrogen or argon in sealed containers. Keep

cool. Protect from sunlight. Store locked up.

Incompatible materials : Acids. Alcohols. Carbon dioxide. Esters. Halogens. Ketones. Moist air. Water.

Storage area : Store in a well-ventilated place. Store away from heat.

#### 7.3. Specific end use(s)

No additional information available

#### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

Methanol (67-56-1)		
USA ACGIH	ACGIH TWA (ppm)	200 ppm
USA ACGIH	ACGIH STEL (ppm)	250 ppm
USA NIOSH	NIOSH REL (TWA) (mg/m³)	260 mg/m <sup>3</sup>
USA NIOSH	NIOSH REL (TWA) (ppm)	200 ppm
USA NIOSH	NIOSH REL (STEL) (mg/m³)	325 mg/m <sup>3</sup>
USA NIOSH	NIOSH REL (STEL) (ppm)	250 ppm
USA OSHA	OSHA PEL (TWA) (mg/m³)	260 mg/m <sup>3</sup>
USA OSHA	OSHA PEL (TWA) (ppm)	200 ppm
USA IDLH	US IDLH (ppm)	6000 ppm

#### 8.2. Exposure controls

Appropriate engineering controls : Provide local exhaust or general room ventilation.

Personal protective equipment : Avoid all unnecessary exposure. Emergency eye wash fountains and safety showers should be

available in the immediate vicinity of any potential exposure.

Hand protection : Neoprene or nitrile rubber gloves.

Eye protection : Chemical goggles or face shield. Contact lenses should not be worn.

Skin and body protection : Wear suitable protective clothing. Long-sleeved fire-resistant lab uniform or coverall is

recommended.

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Respiratory protection

Where exposure through inhalation may occur from use, respiratory protection equipment is recommended. NIOSH-certified caustic organic vapor (black cartridge) respirator.

#### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

Physical state : Solid
Appearance : Powder.
Molecular mass : 54.02 g/mol
Color : White.

Odor : No data available Odor threshold No data available Refractive index No data available рΗ No data available Relative evaporation rate (butyl acetate=1) : No data available : > 300 °C decomposes Melting point Freezing point No data available Boiling point No data available Flash point No data available No data available Auto-ignition temperature Decomposition temperature No data available

Flammability (solid, gas) : Self-heating: may catch fire

Vapor pressure : No data available
Relative vapor density at 20 °C : No data available
Relative density : No data available

Solubility : Reacts with water. Dissolves.

Organic solvent:330 g/l methanol @ 20°C

Log Pow : No data available
Log Kow : No data available
Viscosity, kinematic : No data available
Viscosity, dynamic : No data available
Explosive properties : No data available
Oxidizing properties : No data available
Explosion limits : No data available

#### 9.2. Other information

No additional information available

#### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

No additional information available

#### 10.2. Chemical stability

Stable under nitrogen or argon in sealed containers.

#### 10.3. Possibility of hazardous reactions

Material decomposes slowly in contact with moist air and rapidly in contact with water.

#### 10.4. Conditions to avoid

Heat. Open flame. Sparks.

#### 10.5. Incompatible materials

Acids. Alcohols. Carbon dioxide. Esters. Halogens. Ketones. Moist air. Water.

#### 10.6. Hazardous decomposition products

Caustic organic vapors. Methanol. Sodium hydroxide.

#### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

Acute toxicity : Not classified

Methanol (67-56-1)	
LD50 oral rat	6200 mg/kg
LD50 dermal rabbit	20 g/kg
LC50 inhalation rat (ppm)	22500 ppm (Exposure time: 8 h)

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Methanol (67-56-1)

Wellianoi (67-36-1)			
ATE US (oral)	100.000 mg/kg body weight		
ATE US (dermal)	300.000 mg/kg body weight		
ATE US (vapors)	3.000 mg/l/4h		
Sodium methylate (124-41-4)			
LD50 oral rat	2037 mg/kg		
LD50 dermal rat	> 2000 mg/kg		

Skin corrosion/irritation : Causes severe skin burns and eye damage.

Serious eye damage/irritation : Causes serious eye damage.

Respiratory or skin sensitization : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified
Specific target organ toxicity (single exposure) : Not classified
Specific target organ toxicity (repeated : Not classified

exposure)

Aspiration hazard : Not classified

Symptoms/injuries after inhalation : Inhalation will cause sneezing, irritation and burns.

Symptoms/injuries after skin contact : Causes (severe) skin burns. Worker will notice a slippery feeling on washing. May be harmful in

contact with skin.

Symptoms/injuries after eye contact : Causes serious eye damage.
Symptoms/injuries after ingestion : May be harmful if swallowed.

Reason for classification : Expert judgment

#### **SECTION 12: Ecological information**

#### 12.1. Toxicity

Methanol (67-56-1)	
LC50 fish 1	28200 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
LC50 fish 2	> 100 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])

#### 12.2. Persistence and degradability

No additional information available

### 12.3. Bioaccumulative potential

Methanol (67-56-1)	
BCF fish 1	< 10
Log Pow	-0.77

#### 12.4. Mobility in soil

No additional information available

### 12.5. Other adverse effects

Other adverse effects : This substance may be hazardous to the environment.

Effect on ozone layer : No additional information available

Effect on the global warming : No known ecological damage caused by this product.

### **SECTION 13: Disposal considerations**

#### 13.1. Waste treatment methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Dispose of

contents/container to licensed waste disposal facility.

Ecology - waste materials : Avoid release to the environment.

### **SECTION 14: Transport information**

#### 14.1. UN number

UN-No.(DOT) : 1431 DOT NA no. UN1431

#### 14.2. UN proper shipping name

Proper Shipping Name (DOT) : Sodium methylate

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Department of Transportation (DOT) Hazard

Classes

Hazard labels (DOT) : 4.2 - Spontaneously combustible

8 - Corrosive



Packing group (DOT) : II - Medium Danger

DOT Packaging Exceptions (49 CFR 173.xxx) : None
DOT Packaging Non Bulk (49 CFR 173.xxx) : 212
DOT Packaging Bulk (49 CFR 173.xxx) : 242

#### 14.3. Additional information

Other information : No supplementary information available.

#### Transport by sea

**DOT Vessel Stowage Location** 

: B - (i) The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers, or one passenger per each 3 m of overall vessel length; and (ii) "On deck only" on passenger vessels in which the number of passengers specified in paragraph (k)(2)(i) of this section is exceeded.

: 4.2 - Class 4.2 - Spontaneously combustible material 49 CFR 173.124

#### Air transport

DOT Quantity Limitations Passenger aircraft/rail : 15 kg

(49 CFR 173.27)

DOT Quantity Limitations Cargo aircraft only (49 : 50 kg

CFR 175.75)

### **SECTION 15: Regulatory information**

#### 15.1. US Federal regulations

#### Methanol (67-56-1)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Listed on United States SARA Section 313

SARA Section 313 - Emission Reporting

1.0 %

#### Sodium methylate (124-41-4)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

#### 15.2. International regulations

### Methanol (67-56-1)

Listed on the AICS (Australian Inventory of Chemical Substances)

Listed on the Canadian DSL (Domestic Sustances List)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory

Listed on the Korean ECL (Existing Chemicals List)

Listed on NZIoC (New Zealand Inventory of Chemicals)

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

Japanese Poisonous and Deleterious Substances Control Law

Listed on the Canadian IDL (Ingredient Disclosure List)

Listed on INSQ (Mexican national Inventory of Chemical Substances)

Listed on Turkish inventory of chemical

#### Sodium methylate (124-41-4)

Listed on the AICS (Australian Inventory of Chemical Substances)

Listed on the Canadian DSL (Domestic Sustances List)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory

Listed on the Korean ECL (Existing Chemicals List)

Listed on NZIoC (New Zealand Inventory of Chemicals)

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

Listed on INSQ (Mexican national Inventory of Chemical Substances)

Listed on Turkish inventory of chemical

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#### 15.3. US State regulations

SODIUM METHOXIDE,	95%(124-41-4)				
U.S California - Proposition 65 - Carcinogens List		No			
U.S California - Proposition 65 - Developmental Toxicity		No			
U.S California - Proposition 65 - Reproductive Toxicity - Female		No			
U.S California - Proposition 65 - Reproductive Toxicity - Male		No			
Methanol (67-56-1)					
U.S California - Proposition 65 - Carcinogens List	U.S California - Proposition 65 - Developmental Toxicity	U.S California - Proposition 65 - Reproductive Toxicity - Female	U.S California - Proposition 65 - Reproductive Toxicity - Male	No significance risk level (NSRL)	
No	Yes	No	No		
Sodium methylate (12	4-41-4)				
LLC Colifornia	LLC Colifornia	IIC Colifornia	LLC Colifornia	No significance riels level	

U.S California - Proposition 65 - Carcinogens List	U.S California - Proposition 65 - Developmental Toxicity	U.S California - Proposition 65 - Reproductive Toxicity - Female	U.S California - Proposition 65 - Reproductive Toxicity - Male	No significance risk level (NSRL)
No	No	No	No	

### Sodium methylate (124-41-4)

#### **SECTION 16: Other information**

Abbreviations and acronyms

: Abbreviations: ND: Not Determined, No Data; NA: Not Applicable; LD: Lethal Dose; LC: Lethal Concentration; ATE: Acute Toxicity Estimates; H: hour; °: °C unless otherwise stated; mm: millimeters Hg, torr; PEL: permissible exposure level; TWA: time weighted average; TLV: threshold limit value; TG: Test Guideline; NIOSH: National Institute for Occupational Safety and Health; IARC: International Agency for Research on Cancer; NTP: National Toxicology Program; HMIS: Hazardous Material Information System; CAS No.: Chemcial Abstract Service Registration Number; EC No.: European Commission Registration Number; EC Index No.: European Commission Index Number; OECD: The Organisation for Economic Co-operation and Development.

#### Full text of H-phrases::

1	
3	
Skin corrosion/irritation Category 1B Skin corrosion/irritation Category 2 Specific target organ toxicity (single exposure) Category 1 Specific target organ toxicity (single exposure) Category 3 Highly flammable liquid and vapor Self-heating: may catch fire Toxic if swallowed Toxic in contact with skin Causes severe skin burns and eye damage Causes skin irritation Causes serious eye damage Toxic if inhaled May cause drowsiness or dizziness	

#### **HMIS III Rating**

Health : 3 Serious Hazard - Major injury likely unless prompt action is taken and medical treatment is

Flammability : 4 Severe Hazard Physical : 3 Serious Hazard

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### Safety Data Sheet

Prepared by safety and environmental affairs.

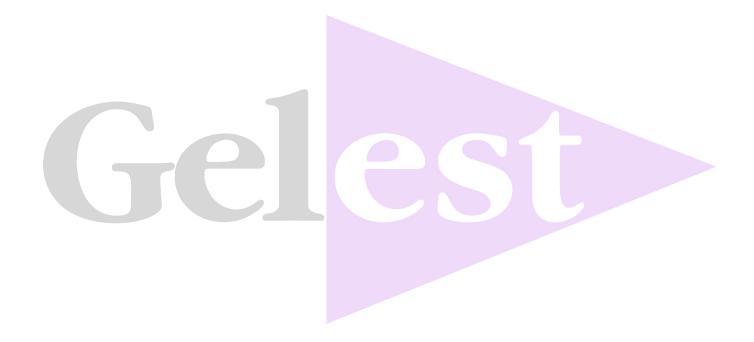
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SDS US (GHS HazCom 2012) - Custom

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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