

SAFETY DATA SHEETS

According to Globally Harmonized System of Classification and Labelling of Chemicals (GHS) - Sixth revised edition

Version: 1.0

Creation Date: Apr 06, 2020

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1: Identification

1.1 Product identifiers

Product name : Potassium methoxide solution in methanol.

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

Identified uses: For Manufacture of substances, Industrial, Intermediate, etc...

1.3 Details of the supplier of the safety data sheet

Company: CHEMLYTE SOLUTIONS CO., LTD

Address: Building A, Jian Qiao Community, 789 Shenhua Road, Xihu District,
Hangzhou 310000, China

Telephone: +86-(571)-85061365

Fax: +86-(571)-85060165

1.4 Emergency telephone number

Emergency Phone # : +1-703-527-3887

2. Hazard(s) identification

Classification of the substance or mixture:

Flammable liquids Category 3

Acute toxicity, oral Category 4

Acute toxicity, dermal Category 4

Acute toxicity, inhalation Category 4

Skin corrosion/irritation Category IB

Serious eye damage/eye irritation Category 1

Specific target organ toxicity, single exposure Category 1

CHS Label elements, including precautionary statements:

Symbol:



Signal word

Danger

Hazard statement(s)

Flammable liquid and vapor. Harmful if swallowed. Harmful in contact with skin. Harmful if inhaled. Causes severe skin burns and eye damage. Causes damage to organs.

Precautionary statement(s):

Prevention:

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. Wear protective gloves/protective clothing/eye protection/face protection/hearing protection. Wash ...thoroughly after handling. Do not eat, drink or smoke when using this product. Do not breathing dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area.

Response:

In case of fire

Use water spray, foam or dry powder to extinguish.

If swallowed

Call a poison center/doctor if you feel unwell. Rinse mouth.

Do NOT induce vomiting.

If on skin (or hair)

Rinse skin with water/shower.

Call a poison center/doctor if you feel unwell.

Specific treatment (see under for further information).

Take off immediately contaminated clothing and wash it before reuse.

If inhaled

Remove person to fresh air and keep comfortable for breathing. Immediately call a poison center/doctor. Specific treatment (see under for further information).

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/doctor.

If exposed or concerned

Call a poison center/doctor. Specific treatment (see under for further information).

Storage

Store in a well-ventilated place.

Keep cool, store locked up.

Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations.

3. Composition/information on ingredients

Chemical Name	CAS No.	Concentration%
Potassium methoxide	865-33-8	31.23%
Methanol	67-56-1	68.44%

4. First aid measures

Description of necessary first aid measures

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a

physician immediately.

In case of skin contact

Wash off with soap and plenty of running water. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of running water for at least 15 minutes and consult a physician immediately.

If ingestion

Rinse mouth with water. Do not induce vomit. Consult a physician.

Most important symptoms/effects, acute and delayed

None

Indication of immediate medical attention and special treatment needed, if necessary

None

5. Firefighting measures

Suitable extinguishing media

Use foam, dry powder, water spray, etc.

Special hazards arising from the chemical

Liquid and vapour are flammable. May explode and burn in high temperature and fire and release toxic fumes.

Special protective actions for fire-fighters

Firefighters must wear air breathing apparatus, fire-fighting suits and protective gloves to extinguish in the upwind direction. Whenever possible, remove the container from the fire to open space and use spray water to cool unopened containers.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

It is recommended that emergency personnel wear protective masks and fire protective overalls.

Do not touch the spill directly.

Environmental precautions

Isolate contaminated areas and restrict access.

Methods and materials for containment and cleaning up

Small amount of leakage: adsorption with sand or other inert materials. Do not allow products to enter restricted areas such as sewers. A large amount of leakage: building a dike or digging a pit to contain. Transfer to a tank truck or special collector with an explosion-proof pump and transport to a waste disposal site for disposal.

7. Handling and storage

Precautions for safe handling

There should be sufficient local exhaust in workplace.

Operators should be trained and strictly follow the operating procedures.

Operators are advised to wear protective masks, corrosion-resistant protective clothing and rubber gloves.

Operators should load and unload lightly during handling to prevent damage to the package.

There should be leakage treatment equipment in workplace.

There may be harmful residues in empty containers.

Conditions for safe storage, including any incompatibilities

Store in a cool, dry, well-ventilated warehouse.

Keep away from fire and heat. Protect from direct sunlight.

The package should be sealed and not exposed to moisture.

It should be stored separately from oxidants, flammable materials, etc., and should not be mixed.

The storage area should be provided with suitable materials to contain spills.

8. Exposure controls/personal protection

Control parameters

Source	Material name	TWA	STEL
China Occupational Exposure Limits for Hazardous Agents in the Workplace	Methanol	25 m g/m ³	50 m g/m ³

Appropriate engineering controls

Close strictly and provide sufficient local exhaust.

Individual protection measures

Eye/face protection

Chemical goggles whenever there is a danger of the material coming in contact with the eyes; goggles must be properly fitted. Full face shield (20 cm, 8 in minimum) may be required for supplementary but never for primary protection of eyes; these afford face protection.

Skin protection

Wear chemical protective gloves, e.g. PVC. Wear safety footwear or safety gumboots, e.g. Rubber. PVC protective suit may be required if exposure severe. When handling corrosive liquids, wear trousers or overalls outside of boots, to avoid spills entering boots.

Respiratory protection

Air respirators should be worn during emergency rescue or evacuation.

Thermal hazards

None

9. Physical and chemical properties

Appearance (physical state ⁹ colour etc)	Colorless or light yellow liquid
Odour	/
Odour Threshold	/
PH	/
Melting point/freezing point	/
Initial boiling point and boiling range	/
Flash point	32.0°C
Evaporation rate	/
Flammability (solid, gas)	/
Upper/lower flammability or explosive limits	/
Vapour pressure	/
Vapour density	/
Relative density	/
Solubility(ies)	/

Partition coefficient: n-octanol/water	/
Auto-ignition temperature	/
Decomposition temperature	/
Viscosity	/

10. Stability and reactivity

Reactivity

None

Chemical stability

This material is stable in normal temperature.

Possibility of hazardous reactions

None

Conditions to avoid

Spark, high temperature and static electricity.

Incompatible materials

Flammable materials and oxidizers.

Hazardous decomposition products

Oxycarbides, etc.

11. Toxicological information

Information on the likely routes of exposure

Ingestion (swallowing), skin/eye exposure and inhalation.

Symptoms related to the physical, chemical and toxicological characteristics

None

Acute health effects

Corrosives produce respiratory tract irritation with coughing, choking and mucous membrane damage. Ingestion of corrosives may produce circumoral burns with a distinct discolouration of the mucous membranes of the mouth, throat and oesophagus. Skin contact with corrosives may result in pain and burns. Direct eye contact with corrosives may produce pain, lachrymation, photophobia and burns.

Chronic health effects

Repeated or prolonged exposure to corrosives may result in the erosion of teeth, inflammatory and ulcerative changes in the mouth and necrosis (rarely) of the jaw. Bronchial irritation, with cough, and frequent attacks of bronchial pneumonia may ensue. Gastrointestinal disturbances may also occur. Chronic exposures may result in dermatitis and/or conjunctivitis.

Numerical measures of toxicity (such as acute toxicity estimates)

Potassium methoxide:

LD50(Oral, rat): 1682 mg/kg

Methanol:

LD50(Oral, rat): 5300 mg/kg

LD50(Dermal, rabbit): 15800 mg/kg

LC50(Inhalation, rat): 36208.63875 mg/l/h

12. Ecological information

Toxicity

Potassium methoxide:			
Endpoint Test	Duration (hr)	Species	Species
LC50	96	Fish	11-850mg/L
EC50	48	Crustacea	> 1 Omg/L
EC50	96	Algae or other aquatic plants	22mg/L
NOEC	96	Crustacea	7-960mg/L
Methanol:			
Endpoint Test	Duration (hr)	Species	Species
LC50	96	Fish	11-8 5 Omg/L
EC50	48	Crustacea	> 1 Omg/L
EC50	96	Algae or other aquatic plants	16.912mg/L
BCF	24	Algae or other aquatic plants	0.05mg/L
ECO	48	Crustacea	> 1 Omg/L
NOEC	72	Crustacea	0.1mg/L

Persistence and degradability

Low (Methanol).

Bioaccumulative potential

Low (BCF = 10) (Methanol).

Mobility in soil

High (KOC = 1) (Methanol).

Other adverse effects

None

13. Disposal considerations

Disposal methods

Dispose this product by safe burial. Damaged containers are prohibited from being reused and should be buried in the prescribed place.

14. Transport information

UN number

2920.

UN proper shipping name

CORROSIVE LIQUID, FLAMMABLE, N.O.S.

Transport hazard class(es)

8+3.

Packing group, if applicable

II.

Environmental hazards

None

Special precautions for user

None

15. Regulatory information

Regulations

This safety data sheet is in compliance with the following national standards: GB/T 16483-2008, GB 13690-2009, GB 18218-2018, GB 15258-2009, GB 6944-2012, GB 190-2009, GB/T 191-2008, GB 12268-2012, GB/T 15098-2008, GBZ 2.1-2019, GBZ 2.2-2007 as well as the following regulations: Railway Dangerous Goods Transport Administrative Regulation, Dangerous Chemicals Safety Administrative Regulation.

16. Other information

References	“Model Regulations on the Transport of Dangerous Goods” “The Globally Harmonized System of Classification and Labelling of Chemicals”
Form Date	06-April-2020

Note 1: When products contain two or more hazardous substances, Safety Data Sheets should be prepared based on the risk of the mixture.

Note 2: Manufacturer/supplier should ensure the correctness of the information contained in the safety data sheets, and updated in a timely manner.

Note 3: As a result of product features without the existence of certain information or no data available (such as boiling point does not exist for the solid) in the table with “7” logo.