

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND OF THE COMPANY / UNDERTAKING

Product identifier:

Product Name: POTASSIUM METHYLATE 32% SOLUTION IN METHANOL

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

Use of the substance/mixture: Preliminary/ intermediate product for organic syntheses Organic intermediate/s.

Company name:

Nexchem Ltd
Unit 3 Barshaw Park
Leycroft Road
Leicester
LE4 1ET
Tel: 0116 2311130
24/7 Emergency Tel: 0800 246 1274
Email: sales@nexchem.co.uk

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture:

CLP: Flam. Liq. 3, Acute Tox 3 Oral, Dermal and Inhalation, Skin Corr. 1B, Eye Dam. 1, Met. Corr. 1, STOT SE 1.

CHIP:

Label elements:



Signal Word:

Danger

Hazard statements:

H226 - Flammable liquid and vapour.
H290 - May be corrosive to metals.
H301 - Toxic if swallowed.
H311 - Toxic in contact with skin.
H331 - Toxic if inhaled.
H314 - Causes severe skin burns and eye damage.
H370 - Causes damage to organs.

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Precautionary statements:

- P243 - Take precautionary measures against static discharge.
- P260 - Do not breathe dust/fume/gas/mist/vapours/spray.
- P280 - Wear protective gloves/protective clothing/eye protection/face protection.
- P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P307+P311 - IF exposed: Call a POISON CENTER or doctor/physician.
- P403+P235 - Store in a well-ventilated place. Keep cool.

Other hazards: Formation of flammable or explosive vapour/air mixture possible.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Mixtures:

Potassium methanolate:

CAS Number: 865-33-8
REACH Registration Number: 01-2119519243-47-XXXX
EC Number: 212-736-1
Concentration: 32%
Categories: Self-heat. 1, Skin Corr. 1B, Skin Corr. 1A, Met. Corr. 1, Flam. Sol. 1, Acute Tox. 4
H Statements: H251, H314, H290, H228, H302, EUH014
Additional information: Reacts violently with water

Methanol:

CAS Number: 67-56-1
REACH Registration Number: 01-2119433307-44-0091
EC Number: 200-659-6
Concentration: 68%
Categories: Flam. Liq. 2, Acute Tox 3 Oral, Dermal, Inhalation, STOT SE 1
H Statements: H225, H301, H311, H331, H370

4. FIRST AID MEASURES

Description of first aid measures:

General Information:

- P304+P341 - IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
- If resuscitation is needed people giving mouth to nose or mouth to mouth to ensure they don't contaminate themselves.
- Wear protective clothing.
- Remove contaminated or saturated clothing immediately and dispose of safely.
- The clinical symptoms of methanol intoxication following exposure to potassium methylate solution may occur after a delay (in most cases after 8-24 hours, but possibly after several days).

Inhalation:

- Remove patient to fresh air.
- Do not leave victims unattended.
- Monitor breathing, give oxygen if necessary.
- P313- Get medical advice/attention.

[cont...]

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- Ingestion:** Do not leave victims unattended.
Do not induce vomiting.
Only when patient fully conscious: Clean mouth with water and drink plenty of water.
Consult a physician immediately.
- Contact with skin:** Wash off immediately with plenty of water.
Flush affected areas of skin under running water for at least 10 minutes.
Never use alcohol, benzine or other solvents.
In case complaints: Consult a doctor immediately.
- Contact with eyes:** Keeping eyelid open, immediately rinse thoroughly for at least 20 minutes using plenty of water or, if necessary, eye rinsing solution.
Immediate further treatment in ophthalmic hospital/ ophthalmologist.
Continue rinsing eye until arrival at ophthalmic hospital.
- Most important symptoms and effects, both acute and delayed:**
Daze.
Gastrointestinal discomfort.
Breathing difficulties.
Spasm.
- Indication of any immediate medical attention and special treatment needed:**
Antidote treatment.
Symptoms upon increasing intoxication: dystopia loss of eyesight.
If substance has been swallowed.
Early endoscopy in order to assess mucosa lesions in the oesophagus and stomach which may appear. If necessary, aspirate leftover substance.

5. FIRE-FIGHTING MEASURES

- Extinguishing media:** Water spray.
Foam.
CO₂.
Dry powder.
DO NOT use water jet.
- Special hazards arising from the substance or mixture:**
In case of fire cool endangered containers with water.
Hazardous fumes in fires, specific to product: Carbon monoxide.
- Advice for firefighters:** Water for firefighting must not be introduced in the sewer system, subsoil, or surface waters.
Assure that there are sufficient fire water retaining facilities.
Contaminated firefighting water must be disposed of in conformity with the regulations of the local authorities.
Fire residues should be disposed of in accordance with the regulations.
In case of fire: Have ready/wear respiratory protection equipment.
Wear suitable protective clothing.

[cont...]

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

Assure sufficient ventilation.
Wear protective clothing.

Environmental Precautions:

Prevent product from entering drainage system.
Do not allow to penetrate the ground/ soil.

Methods and material for containment and cleaning up:

Take up mechanically or with an absorbent material.
Absorbent for liquids, universal absorbent.

Reference to other sections:

Wear personal protective equipment; see section 8.

7. HANDLING AND STORAGE

Precautions for safe handling:

Handle and open container with care.
Provide good ventilation.
Observe the rules usually applicable when handling chemicals.
Wear protective clothing as per section 8.

Conditions for safe storage, including any incompatibilities:

Keep away from sources of ignition - No Smoking.
Take precautionary measures against static discharges.
Keep container tightly sealed.
Keep in a well-ventilated place.

Specific end use(s):

See Section 1.2

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters:

TWA 200 ppm. STEL: 250 ppm.

Exposure controls:



Handle in accordance with good industrial hygiene and safety practice.
Engineering controls should be provided which maintain airborne concentrations below the relevant guidelines.
If ventilation is insufficient wear dust mask or chemical respirator whichever is appropriate.
Wear chemical resistant gloves.
Wear tightly fitting safety goggles/ face shield.
Wash hands before breaks and at the end of workday.
Remove contaminated clothing.
P270 - Do not eat, drink or smoke when using this product.

[cont...]

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties:

Physical State:	Liquid
Colour:	Colourless
Boiling Point/Range:	93.5 °C
Flash point:	32 °C
Odour:	Alcoholic
Molecular Weight:	90.45
Specific Gravity:	Specific gravity (water=1) 1.1 to 1.3 @ 25°C
Density:	Density 0.993 g/cm ³ at 20°C
pH:	pH - No information available.
Lower:	5.5% (V)
Upper:	44% (V)
Vapour Pressure:	127 hPa @ 20°C
Auto-flammability:	70°C (1013)
Viscosity:	Viscosity 18 mPas at 20°C
Solubility in water:	Partly miscible.
Other information:	No further relevant information available.

10. STABILITY AND REACTIVITY

Reactivity: No known dangerous reactions under normal use.

Chemical stability: Stable under normal temperature conditions and recommended use.

Possibility of hazardous reactions: Risk of spontaneous ignition if exposed to air and elevated temperatures.

Exothermic reaction with water, air, oxidizing agents and acids.

In contact with water sodium and potassium methanolate react very fast, quantitative and exothermic to methanol and the corresponding alkali hydroxides.

Conditions to avoid: Protect from moisture.

Incompatible materials: Acids.
Oxidizing Agents.
Water.
Oxygen.
Air.

Hazardous Decomposition Products: Decomposition products on contact with water/air humidity.

Potassium hydroxide.

Methanol.

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects: All values below relate to methanol.

LD50 (oral, rat) 1687 mg/kg.

Skin contact : Hazardous by absorption through the skin.

Eye contact: Risk of blinding on contact with eyes.

All values below relate to sodium methanolate.

LD50 (dermal rat) > 2000 mg/kg.

Skin contact : Rabbit 3 mins; Causes severe burns.

Skin contact : Rabbit 4 hours; Causes burns.

Sensitization: Not Classified.

Carcinogenicity: Not Classified.

Reproductive toxicity: Not Classified.

Teratogenicity: As sodium and potassium methylates rapidly hydrolyse in water to methanol and sodium or potassium hydroxide respectively, the data of the hydrolysis products are relevant for this substance as well.

Genotoxicity: Not Classified.

STOT-single exposure: Not Classified.

STOT-repeated exposure: Not Classified

12. ECOLOGICAL INFORMATION

Toxicity:

All values below relate to sodium methanolate.

LC50 (Leuciscus idus melanotus) 346 mg/l (48 hr).

LC50 (Lepomis macrochirus) 15400 mg/l (96 hr).

EC50 (Lepomis macrochirus) 12700 mg/l (96 hr).

NOEC : (Oryzias latipes) 7900 - 15800 mg/l (200 hr).

EC50 (Daphnia magna) > 10000 mg/l (24 hr).

EC50 (Daphnia magna) > 10000 mg/l (48 hr).

EC50 (scenedesmus subspicatus) 302.2 mg/l (72 hr).

EC50 (Selenastrum capricornutum) 22000 mg/l (96 hr).

EC20 (Activated sludge) 96.6 mg/l 1440 mins.

IC50 (Community sewage sludge) > 1000 mg/l (3 hr).

Persistence and degradability:

Readily biodegradable.

95 % / 20 days

Mobility in soil:

Not expected to adsorb on soil.

Results of PBT and vPvB assessment: No information available.

Other Adverse Effects:

No information available.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods:

Dispose of the product, packaging and any residuals in compliance with local and national regulations.

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14. TRANSPORT INFORMATION

UN Number:

UN No.: 2920

Proper Shipping Name: CORROSIVE LIQUID, FLAMMABLE, N.O.S. (Potassium methylate, solution in methanol).

Transport hazard class(es):

Hazard Class: 8 (3).

Packing Group: II

Environmental hazards: No further relevant information available.

Special precautions for user: Yes.

Tunnel Restriction Code: D/E

Transport in bulk according to Annex II of MARPOL and the IBC code: Not applicable.

15. REGULATORY INFORMATION

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

EINECS: Listed

US TSCA: Listed

DSL/NDSL Inventory: Listed

Australian Inventory of Chemicals Substances (AICS): Listed

Japan MITI: Listed - TCCL: Listed

Philippine Inventory of Chemicals and Chemical Substances (PICCS): Listed

China (IECSC): Listed

New Zealand (NZioC): Listed

Note: The regulatory information given above only indicates the principal regulations specifically applicable to the product described in the safety data sheet. The user's attention is drawn to the possible existence of additional provisions which complete these regulations. Refer to all applicable national, international and local regulations or provisions.

16. OTHER INFORMATION

Legal disclaimer: The information contained in this SDS does not constitute a risk assessment, and should not replace the user's own assessment of risks as required by other health and safety legislation. This advice is given by Nexchem Ltd who accept no legal liability for it except otherwise provided by law. The information contained herein is based on the present state of our knowledge and is intended to describe our products from the point of view of safety requirements. It should not therefore be construed as guaranteeing specific properties.