国药集团化学试剂有限公司
Sinopharm Chemical Reagent Co.,Ltd

SAFETY DATA SHEET

1. Identification of the substance/mixture and of the company/undertaking

Product Name:Methanol
CAS: 67-56-1
Application: Laboratory chemicals, Manufacture of substances
Manufacturer: Sinopharm Chemical Reagent Co.,Ltd. No.52 Ning Bo Road,Shanghai 200002,China
Fax: 86-021-6321403
Emergency Telephone: 86-0532-83889090
Email: sj_zjzx@sinopharm.com
Website: http://www.reagent.com.cn
MSDS No: SCRC CSDS67-56-1 Methanol

2. Hazards identification

Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Flammable liquids (Category 2), H225Acute toxicity, Oral (Category 3), H301Acute toxicity, Inhalation (Category 3), H331Acute toxicity, Dermal (Category 3), H311Specific target organ toxicity - single exposure (Category 1), H370

Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram

Signal word: Danger
Hazard statement(s):H225 Highly flammable liquid and vapour.H301 + H311 + H331 Toxic if swallowed, in contact with skin or if inhaledH370 Causes damage to organs.
Precautionary statement(s):
P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.P233 Keep container tightly closed.P240 Ground/bond container and receiving equipment.P241 Use explosion-proof electrical/ ventilating/ lighting/ equipment.P242 Use only non-sparking tools.P243 Take precautionary measures against static discharge.P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.P264 Wash skin thoroughly after handling.P270 Do not eat, drink or smoke when using this product.P271 Use only outdoors or in a well-ventilated area.P280 Wear protective gloves/ eye protection/ face protection.
P301 + P310 + P330 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Rinse mouth.P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing.Rinse skin with water/shower.P304 + P340 + P311 IF INHALED: Remove person to fresh air and keep comfortable forbreathing. Call a POISON CENTER or doctor/ physician.P307 + P311 IF exposed: Call a POISON CENTER or doctor/ physician.P362 Take off contaminated clothing and wash before reuse.P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam toextinguish.
P403 + P233 Store in a well-ventilated place. Keep container tightly closed.P403 + P235 Store in a well-ventilated place. Keep cool.P405 Store locked up.
P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards

none

3. Composition/information on ingredients

Substance/Mixture: Substance

Component	CAS RN	Concentration
Methanol	67-56-1	⩽100

4. First aid measures

Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled

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

In case of skin contact

Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

In case of eye contact

Flush eyes with water as a precaution.

If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult aphysician.

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

Indication of any immediate medical attention and special treatment needed

no data available

5. Firefighting measures

Extinguishing media

Suitable extinguishing mediaDry powder Dry sandUnsuitable extinguishing mediaDo NOT use water jet.

Special hazards arising from the substance or mixture

Carbon oxides

Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

Further information

No data available

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Wear respiratory protection. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sourcesof ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations.Vapours can accumulate in low areas.For personal protection see section 8.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Methods and materials for containment and cleaning up

Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth,vermiculite) and place in container for disposal according to local / national regulations (see section 13).

Reference to other sections

For disposal see section 13.

7. Handling and storage

Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.Use explosion-proof equipment.Keep away from sources of ignition - No smoking.Take measures to prevent the buildup of electrostatic charge.For precautions see section 2.2.

Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefullyresealed and kept upright to prevent leakage.Storage class (TRGS 510): Flammable liquids

Specific end use(s)

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

8. Exposure controls/personal protection

Control parameters

Components with workplace control parameters

MAC: —
PC-STEL: 50
TLV-TWA: No data available
PC-TWA: 25
TLV-C: No data available
TLV-STEL: No data available

Exposure controls

Appropriate 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

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

Skin protection

Complete suit protecting against chemicals, Flame retardant antistatic protective clothing., The type ofprotective equipment must be selected according to the concentration and amount of the dangerous substanceat the specific workplace.
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.If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact thesupplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multipurposecombination (US) or type AXBEK (EN 14387) respirator cartridges as a backup to engineeringcontrols. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respiratorsand components tested and approved under appropriate government standards such as NIOSH (US) or CEN(EU).

Control of environmental exposure

Do not let product enter drains.

9. Physical and chemical properties

Information on basic physical and chemical properties

a) Appearance	Form: liquidColour: colourless
b) Odour	pungent
c) Odour Threshold	No data available
d) pH	No data available
e) Melting point/freezing point	-98℃
f) Initial boiling point and boiling range	64-65℃/760mmHg
g) Flash point	51.8℉/11℃
h) Evapouration rate	No data available

i) Flammability (solid, gas)	No data available
j) Upper/lower flammability or explosive limits	No data available
	No data available
k) Vapour pressure	130.3hPa (20.0℃)
l) Vapour density	1.11
m) Relative density	ρ(20)0.791-0.794g/mL
n) Water solubility	completely miscible
o) Partition coefficient:noctanol/water	-0.77
p) Auto-ignition temperature	455.0℃在1,013hPa
q) Decomposition temperature	No data available
r) Viscosity	No data available
s) Explosive properties	Not explosive
t) Oxidizing properties	The substance or mixture is not classified as oxidizing.

Other safety information
No data available.

10. Stability and reactivity
Reactivity
No data available
Chemical stability
Stable under recommended storage conditions.
Possibility of hazardous reactions
No data available
Conditions to avoid
Heat, flames and sparks.
Incompatible materials
Acid chlorides, Acid anhydrides, Oxidizing agents, Alkali metals, Reducing agents, Acids
Hazardous decomposition products
Other decomposition products - No data availableIn the event of fire: see section 5

11. Toxicological information
Information on toxicological effects
Acute toxicity
LDLO Oral - Human - 143 mg/kgRemarks: Lungs, Thorax, or Respiration:Dyspnea. Ingestion may cause gastrointestinal irritation, nausea, vomiting anddiarrhoea.LD50 Oral - Rat - 1,187 - 2,769 mg/kgLC50 Inhalation - Rat - 4 h - 128.2 mg/lLC50 Inhalation - Rat - 6 h - 87.6 mg/lLD50 Dermal - Rabbit - 17,100 mg/kgNo data available
Skin corrosion/irritation
Skin - RabbitResult: No skin irritation
Serious eye damage/eye irritation
Eyes - RabbitResult: No eye irritation
Respiratory or skin sensitization
Maximisation Test (GPMT) - Guinea pigDoes not cause skin sensitisation.(OECD Test Guideline 406)
Germ cell mutagenicity
Ames testS. typhimuriumResult: negativein vitro assayfibroblastResult: negativeMutation in mammalian somatic cells.Mutagenicity (in vivo mammalian bone-marrow cytogenetic test, chromosomal analysis)Mouse - male and femaleResult: negative
Carcinogenicity
IARC: No component of this product present at levels greater than or equal to 0.1% is identified asprobable, possible or confirmed human carcinogen by IARC.NTP: No component of this product present at levels greater than or equal to 0.1% is identified as aknown or anticipated carcinogen by NTP.OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as acarcinogen or potential carcinogen by OSHA.
Reproductive toxicity
Damage to fetus not classifiableFertility classification not possible from current data.
Specific target organ toxicity - single exposure
Causes damage to organs.
Specific target organ toxicity - repeated exposure
The substance or mixture is not classified as specific target organ toxicant, repeated exposure.
Aspiration hazard
No aspiration toxicity classification
Additional Information
RTECS: PC1400000Effects due to ingestion may include:, Headache, Dizziness, Drowsiness, metabolic acidosis, Coma, Seizures., Methylalcohol may be fatal or cause blindness if swallowed.Stomach - Irregularities - Based on Human EvidenceStomach - Irregularities - Based on Human Evidence

12. Ecological information
Toxicity
Toxicity to fish mortality LC50 - Lepomis macrochirus (Bluegill) - 15,400.0 mg/l - 96 hNOEC - Oryzias latipes - 7,900 mg/l - 200 hToxicity to daphnia andother aquaticinvertebratesEC50 - Daphnia magna (Water flea) - > 10,000.00 mg/l - 48 hToxicity to algae Growth inhibition EC50 - Scenedesmus capricornutum (fresh water algae) -22,000.0 mg/l - 96 h
Persistence and degradability
Biodegradability aerobic - Exposure time 5 dResult: 72 % - rapidly biodegradableBiochemical OxygenDemand (BOD)600 - 1,120 mg/gChemical OxygenDemand (COD)1,420 mg/gTheoretical oxygendemand1,500 mg/g
Bioaccumulative potential
Bioaccumulation Cyprinus carpio (Carp) - 72 dat 20 ° C - 5 mg/lBioconcentration factor (BCF): 1.0
Mobility in soil
Will not adsorb on soil.
Results of PBT and vPvB assessment

No data available

Other adverse effects

Additional ecologicalinformationAvoid release to the environment.Stability in water at 19 ° C83 - 91 % - 72 hRemarks: Hydrolyses on contact with water.Hydrolyses readily

13. Disposal considerations

Waste treatment methods

Product Contact a licensed professional waste disposal service to dispose of this material. Offer surplus and non-recyclable solutions to a licensed disposal company. Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable.

Contaminated packaging

Dispose of as unused product.

14. Transport information

UN number

ADR/RID:1230	IMDG:1230	IATA:1230

UN proper shipping name

ADR/RID:METHANOL	IMDG:METHANOL	IATA:METHANOL

Transport hazard class(es)

ADR/RID:3(6.1)	IMDG:3(6.1)	IATA:3(6.1)

Packaging group

ADR/RID:II	IMDG:II	IATA:II

Environmental hazards

ADR/RID:no	IMDG:no	IATA:no

Special precautions for user

no data available

15. Regulatory information

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

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

No data available

Chemical Safety Assessment

For this product a chemical safety assessment was not carried out

16. Other information

Full text of H-Statements referred to under sections 2 and 3.

H225 Highly flammable liquid and vapour.H301 + H311 + H331 Toxic if swallowed, in contact with skin or if inhaledH370 Causes damage to organs.

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. Sinopharm Chemical Reagent Co.,Ltd. and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product.