

Methanol**34966-1L**

Version 1.1.1

Revision Date 06/11/2017

Print Date 02/13/2019

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Methanol

SDS Number : 000000020240

Product Use Description : Laboratory chemicals

Manufacturer or supplier's details : CHEM-SUPPLY Pty Ltd
38-50 Bedford St.
Gillman SA 5013, Australia

For more information call : +61 8 8440 2000
(Monday-Friday, 9:00am-5:00pm)

In case of emergency call : **Medical: 1-800-498-5701 or +1-303-389-1414**
Transportation (CHEMTREC): 1-800-424-9300 or +1-703-527-3887
CHEMTREC in Australia: +(61)-290372994
(24 hours/day, 7 days/week)

2. HAZARDS IDENTIFICATION**Classification of the substance or mixture**

Classification of the substance or mixture : Flammable liquids, Category 2
Acute toxicity, Category 3, Oral
Acute toxicity, Category 3, Inhalation
Acute toxicity, Category 3, Dermal
Specific target organ toxicity - single exposure, Category 1

GHS Label elements, including precautionary statements

Symbol(s) :



Signal word : Danger

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Hazard statements	: Highly flammable liquid and vapour. Toxic if swallowed, in contact with skin or if inhaled. Causes damage to organs.
Precautionary statements	: Prevention: Keep away from heat/sparks/open flames/hot surfaces. 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. Do not breathe dust/ fume/ gas/ mist/ vapours/ spray. Wash skin thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection. Response: IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician. Rinse mouth. IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF exposed: Call a POISON CENTER or doctor/ physician. Remove/Take off immediately all contaminated clothing. Wash contaminated clothing before reuse. In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction. Storage: Store in a well-ventilated place. Keep container tightly closed. Keep cool. Store locked up. Disposal: Dispose of contents/ container to an approved waste disposal plant.
Other hazards which do not result in classification	: Repeated or prolonged exposure may irritate eyes, skin and respiratory system.

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3. COMPOSITION/INFORMATION ON INGREDIENTSFormula : CH₄O

Chemical nature : Substance

CAS-No. : 67-56-1

Hazardous components

Chemical name	CAS-No.	Concentration
Methanol	67-56-1	<= 100%

4. FIRST AID MEASURES

General advice : First aider needs to protect himself.
Move out of dangerous area.
Take off all contaminated clothing immediately.
Show this safety data sheet to the doctor in attendance.

Inhalation : Call a physician immediately.
Remove to fresh air.
If not breathing, give artificial respiration.
If breathing is difficult, give oxygen.
Use oxygen as required, provided a qualified operator is present.

Skin contact : After contact with skin, wash immediately with plenty of water.
Call a physician immediately.

Eye contact : Rinse thoroughly with plenty of water, also under the eyelids.
Protect unharmed eye.
Call a physician immediately.

Ingestion : Immediately give large quantities of water to drink.
Do NOT induce vomiting.
Never give anything by mouth to an unconscious person.
Call a physician immediately.

5. FIREFIGHTING MEASURES

Suitable extinguishing media : Water spray
Alcohol-resistant foam
Carbon dioxide (CO₂)

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	Dry powder
Unsuitable extinguishing media	: Do not use a solid water stream as it may scatter and spread fire.
Specific hazards during firefighting	: Flammable. Vapours may form explosive mixtures with air. Vapours are heavier than air and may spread along floors. Vapors may travel to areas away from work site before igniting/flashing back to vapor source. In case of fire hazardous decomposition products may be produced such as: Carbon monoxide Carbon dioxide (CO ₂) Formaldehyde
Special protective equipment for firefighters	: Wear self-contained breathing apparatus and protective suit.
Further information	: Use water spray to cool unopened containers. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. : HAZCHEM Code: 2WE

6. ACCIDENTAL RELEASE MEASURES

Personal precautions	: Ensure adequate ventilation. Remove all sources of ignition. Wear personal protective equipment. Unprotected persons must be kept away.
Environmental precautions	: Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Discharge into the environment must be avoided. Do not flush into surface water or sanitary sewer system. Do not allow run-off from fire fighting to enter drains or water courses.
Methods for cleaning up	: Ventilate the area. No sparking tools should be used. Use explosion-proof equipment. Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).

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7. HANDLING AND STORAGE

Handling

Advice on safe handling : Exhaust ventilation at the object is necessary.
Use explosion-proof equipment.
Wear suitable protective clothing and gloves.

Advice on protection against fire and explosion : The heavy vapours can overcome a considerable distance up to the source of ignition.
Use only in explosion-proof areas.
Keep product and empty container away from heat and sources of ignition.
Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapours).

Temperature class : T1

Storage

Requirements for storage areas and containers : Store in area designed for storage of flammable liquids.
Protect from physical damage.
Keep containers tightly closed in a dry, cool and well-ventilated place.
Store in original container.
Keep locked up or in an area accessible only to qualified or authorised persons.

Further information on storage conditions : Product is hygroscopic.

Materials to avoid : Oxidizing agents

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value	Control parameters	Update	Basis
Methanol	67-56-1	STEL : Short Term Exposure Limit (STEL):	250 ppm 328 mg/m ³	12 2011	AU NOEL: Australia. National Workplace OELs (Workplace Exposure Standards for Airborne Contaminants, Appendix A)
		SKIN_DES : Skin designation:	Can be absorbed through the	12 2011	AU NOEL: Australia. National Workplace OELs (Workplace

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			skin.		Exposure Standards for Airborne Contaminants, Appendix A)
		TWA : Time Weighted Average (TWA):	200 ppm 262 mg/m ³	12 2011	AU NOEL: Australia. National Workplace OELs (Workplace Exposure Standards for Airborne Contaminants, Appendix A)
		SKIN_DES : Skin designation:	Can be absorbed through the skin.	08 2005	AU OEL: Australia. OELs. (Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment)
		STEL : Short Term Exposure Limit (STEL):	250 ppm 328 mg/m ³	08 2005	AU OEL: Australia. OELs. (Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment)
		TWA : Time Weighted Average (TWA):	200 ppm 262 mg/m ³	08 2005	AU OEL: Australia. OELs. (Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment)

Engineering measures

Use with local exhaust ventilation.

Electrical equipment should be protected to the appropriate standard.

Personal protective equipment

Respiratory protection : In the case of vapour formation use a respirator with an approved filter.

Hand protection : Impervious butyl rubber gloves
Gloves must be inspected prior to use.
Replace when worn.

Eye protection : Safety goggles

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Skin and body protection	: Wear as appropriate: Solvent-resistant apron Flame retardant antistatic protective clothing. If splashes are likely to occur, wear: Protective suit
Hygiene measures	: When using do not eat, drink or smoke. Wash hands before breaks and immediately after handling the product. Keep working clothes separately. Do not swallow. Do not breathe vapours or spray mist. Avoid contact with skin, eyes and clothing.
Protective measures	: Ensure that eyewash stations and safety showers are close to the workstation location. Legal requirements are to be considered in regard of the selection, use and care of personal protective equipment. Do not swallow. Do not breathe vapours or spray mist.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	: liquid
Colour	: colourless
Odour	: characteristic
pH	: Note: Not applicable
Melting point/range	: -98 °C
Boiling point/boiling range	: 64 - 65 °C at 1,013 hPa
Flash point	: 52 °F (11 °C) Method: DIN 51755
Flammability	: Not applicable
Lower explosion limit	: 5 %(V)

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Upper explosion limit : 50 % (V)

Vapour pressure : 128 hPa
at 20 °C (68 °F)532 hPa
at 50 °C (122 °F)

Density : 0.79 g/cm³ at 20 °C

Water solubility : Note: completely miscible

Partition coefficient: n-octanol/water : log Pow: -0.71

Ignition temperature : 455 °C
Method: DIN 51794

Auto-ignition temperature : Note: not auto-flammable

Decomposition temperature : Note: At normal pressure may be distilled without decomposition.

Viscosity, dynamic : ca. 0.55 mPa.s at 25 °C

Oxidizing properties : The substance or mixture is not classified as oxidizing.

Molecular weight : 32.04 g/mol

10. STABILITY AND REACTIVITY

Chemical stability : Stable under recommended storage conditions.

Possibility of hazardous reactions : Hazardous polymerisation does not occur.

Conditions to avoid : Heat, flames and sparks.

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Keep away from direct sunlight.

Incompatible materials to avoid	: Oxidizing agents
Hazardous decomposition products	: In case of fire hazardous decomposition products may be produced such as: Carbon monoxide Carbon dioxide (CO ₂) Formaldehyde

11. TOXICOLOGICAL INFORMATION

Acute oral toxicity	: LD50: 5,630 mg/kg Species: Rat
Acute inhalation toxicity	: LC50: > 80 mg/l Exposure time: 4 h Species: Rat
Acute dermal toxicity	: LD50: > 10,000 mg/kg Species: Rabbit
Skin irritation	: Species: Rabbit Result: irritating
Eye irritation	: Species: Rabbit Result: irritating
Sensitisation	: Note: no data available
Repeated dose toxicity Methanol	: Species: Rat Application Route: Inhalation Test substance: Methanol Developmental Toxicity NOAEL (maternal toxicity) 10,000 ppm NOAEL (developmental toxicity) 5,000 ppm

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Skeletal and visceral malformations.

Genotoxicity in vitro
Methanol : Note: In vitro tests did not show mutagenic effects

Genotoxicity in vivo
Methanol : Note: In vivo tests did not show mutagenic effects

Further information : Note: When swallowed, there is a danger of blindness.

12. Ecological information**Toxicity**

Toxicity to fish : LC50: 15,400 mg/l
Exposure time: 96 h
Species: Lepomis macrochirus (Bluegill sunfish)

Toxicity to daphnia and other aquatic invertebrates : EC50: > 10,000 mg/l
Exposure time: 48 h
Species: Daphnia magna (Water flea)

Toxicity to algae : Note: no data available

Toxicity to bacteria : EC50: ca. 71,000 mg/l
Species: Bacteria

Persistence and degradability

Biodegradability : Result: Readily biodegradable.
Value: 99 %
Method: OECD Test Guideline 301D

Bioaccumulative potential

Bioaccumulation : Note: Bioaccumulation is unlikely.

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Mobility in soil
Mobility : Note: no data available

Other adverse effects

Additional ecological information : Do not flush into surface water or sanitary sewer system.

Biochemical Oxygen Demand (BOD) : Value: 1,120 mg/g

Chemical Oxygen Demand (COD) : Value: 1,500 mg/g

13. DISPOSAL CONSIDERATIONS

Product : In accordance with local and national regulations.

14. TRANSPORT INFORMATION**ADR**

UN/ID No. : UN 1230
Description of the goods : METHANOL
Class : 3
Packing group : II
Classification Code : FT1
Hazard Identification Number : 336
Labels : 3 (6.1)

ADG_ROAD

UN/ID No. : UN 1230
Description of the goods : METHANOL
Class : 3
Packing group : II
Labels : 3 (6.1)

IATA

UN/ID No. : UN 1230
Description of the goods : Methanol
Class : 3
Packing group : II
Labels : 3 (6.1)
Packing instruction (cargo) : 364

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aircraft)

Packing instruction : 352
(passenger aircraft)
Packing instruction : Y341
(passenger aircraft)

IMDG

UN/ID No. : UN 1230
Description of the goods : METHANOL
Class : 3
Packing group : II
Labels : 3 (6.1)
EmS Number 1 : F-E
EmS Number 2 : S-D

Marine pollutant : no

HAZCHEM Code: 2WE

15. REGULATORY INFORMATION**National regulatory information**

Standard for the Uniform : Schedule 6
Scheduling of Medicines and
Poisons

Other international regulations**Notification status**

US. Toxic Substances : On TSCA Inventory
Control Act

Australia. Industrial Chemical : On the inventory, or in compliance with the inventory
(Notification and
Assessment) Act

Canada. Canadian : All components of this product are on the Canadian DSL
Environmental Protection Act
(CEPA). Domestic
Substances List (DSL)

Japan. Kashin-Hou Law List : On the inventory, or in compliance with the inventory

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Korea. Toxic Chemical Control Law (TCCL) List	: On the inventory, or in compliance with the inventory
Philippines. The Toxic Substances and Hazardous and Nuclear Waste Control Act	: On the inventory, or in compliance with the inventory
China. Inventory of Existing Chemical Substances	: On the inventory, or in compliance with the inventory
New Zealand. Inventory of Chemicals (NZIoc), as published by ERMA New Zealand	: On the inventory, or in compliance with the inventory

16. OTHER INFORMATION**Sources of key data used to compile the Safety Data Sheet:**

1. National Code of Practice for the Preparation of Material Safety Data Sheets 2nd Edition [NOHSC:2011(2003)]
2. Approved Criteria for Classifying Hazardous Substances [NOHSC:1008(1999)]
3. List of Designated Hazardous Substances [NOHSC:10005(1999)]
4. Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment [NOHSC:1003(1995)]
5. Australian Dangerous Goods Code, No. 6 [National Road Transport Commission]
6. Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP), No. 19 [NDPSC: 2004]
7. National Code of Practice for the Labelling of Workplace Substances [NOHSC:2012(1994)]

Further information

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Final determination of suitability of any material is the sole responsibility of the user.

This information should not constitute a guarantee for any specific product properties.

Changes since the last version are highlighted in the margin. This version replaces all previous versions.

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Prepared by:

Honeywell Performance Materials and Technologies Product Stewardship Group

End of Safety Data Sheet