SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Methanol

SDS Number : 000000011383

Product Use Description : Solvent

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 : Acute toxicity, Category 3, Oral
Acute toxicity, Category 3, Dermal
Acute toxicity, Category 3, Inhalation
Flammable liquids, Category 2
Specific target organ toxicity - single exposure, Category 1

GHS Label elements, including precautionary statements

Symbol(s) : 

Signal word : Danger
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.
3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms: Methyl Alcohol
Formula: CH4O
Chemical nature: Substance
CAS-No.: 67-56-1

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS-No.</th>
<th>Concentration</th>
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<tr>
<td>Methanol</td>
<td>67-56-1</td>
<td>&lt;= 100%</td>
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</table>

4. FIRST AID MEASURES

Inhalation: Call a physician immediately. Remove to fresh air. If breathing is difficult, give oxygen. Use oxygen as required, provided a qualified operator is present.

Skin contact: Wash off immediately with plenty of water for at least 15 minutes. Take off contaminated clothing and shoes immediately. Wash contaminated clothing before re-use. Call a physician.

Eye contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Call a physician.

Ingestion: Call a physician immediately. Do NOT induce vomiting. Never give anything by mouth to an unconscious person.

Notes to physician: Treat symptomatically.

5. FIREFIGHTING MEASURES

Suitable extinguishing media: Alcohol-resistant foam Carbon dioxide (CO2) Dry chemical
Cool closed containers exposed to fire with water spray.

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/flammable back to vapor source. In case of fire hazardous decomposition products may be produced such as: Carbon monoxide Carbon dioxide (CO2) Formaldehyde

Special protective equipment for firefighters: Wear self-contained breathing apparatus and protective suit.

Further information: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

HAZCHEM Code: 2WE

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Wear personal protective equipment. Immediately evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Remove all sources of ignition. Do not breathe vapours or spray mist. Avoid contact with skin, eyes and clothing.

Environmental precautions: Prevent further leakage or spillage if safe to do so. 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).
7. HANDLING AND STORAGE

Handling
Advice on safe handling: Wear personal protective equipment. Use only in well-ventilated areas. Keep container tightly closed. Do not smoke. Do not breathe vapours or spray mist. Avoid contact with skin, eyes and clothing.

Advice on protection against fire and explosion: Keep away from fire, sparks and heated surfaces. Take precautionary measures against static discharges. Ensure all equipment is electrically grounded before beginning transfer operations. Use explosion-proof equipment. Keep product and empty container away from heat and sources of ignition. No sparking tools should be used. No smoking.

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. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Keep away from heat and sources of ignition. Keep away from direct sunlight. Store away from incompatible substances. Container hazardous when empty. Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.

Materials to avoid: Strong oxidizing agents, Aluminium, Magnesium, May attack many plastics, rubbers and coatings.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Value</th>
<th>Control parameters</th>
<th>Update</th>
<th>Basis</th>
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### Term Exposure Limit (STEL):

<table>
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### Engineering measures

Use with local exhaust ventilation.
Prevent vapour buildup by providing adequate ventilation during and after use.

### Personal protective equipment
Respiratory protection: In case of insufficient ventilation, wear suitable respiratory equipment. For rescue and maintenance work in storage tanks use self-contained breathing apparatus. Use NIOSH approved respiratory protection.

Hand protection: Solvent-resistant gloves. Gloves must be inspected prior to use. Replace when worn.

Eye protection: Do not wear contact lenses. Wear as appropriate: Safety glasses with side-shields. If splashes are likely to occur, wear: Goggles or face shield, giving complete protection to eyes.

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 breathe vapours or spray mist. Avoid contact with skin, eyes and clothing. This material has an established AIHA ERPG exposure limit. The current list of ERPG exposure limits can be found at http://www.aiha.org/insideaiha/GuidelineDevelopment/ERPG/Documents/2011erpgweelhandbook_table-only.pdf.

Protective measures: Ensure that eyewash stations and safety showers are close to the workstation location.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: liquid, clear

Colour: colourless

Odour: slight alcohol-like

pH: Note: Not applicable

Melting point/range: Note: Not applicable
Boiling point/boiling range : 64.7 °C

Flash point: 52 °F (11 °C)
Method: closed cup

Evaporation rate: ca. 5
Method: Compared to Butyl acetate.

Lower explosion limit: 6 %(V)
Upper explosion limit: 36 %(V)

Vapour pressure: 129.32 hPa
at 20 °C(68 °F)

Vapour density: 1.11
Note: (Air = 1.0)

Density: 0.792 g/cm³ at 20 °C

Water solubility: Note: completely soluble

Ignition temperature: 464 °C

Decomposition temperature: Note: No decomposition if used as directed.

Molecular weight: 32.04 g/mol
10. STABILITY AND REACTIVITY

Chemical stability: Stable under recommended storage conditions.

Possibility of hazardous reactions: Hazardous polymerization does not occur.

Conditions to avoid: Heat, flames and sparks. Keep away from direct sunlight.

Incompatible materials to avoid: Strong oxidizing agents, Aluminium, Magnesium. May attack many plastics, rubbers and coatings.

Hazardous decomposition products: In case of fire hazardous decomposition products may be produced such as: Carbon monoxide, Carbon dioxide (CO2), Formaldehyde.

11. TOXICOLOGICAL INFORMATION

Acute oral toxicity: LD50: 5,628 mg/kg. Species: Rat

Acute inhalation toxicity: LC50: 64000 ppm. Exposure time: 4 h. Species: Rat

Acute dermal toxicity: LD50: 15,800 mg/kg. Species: Rabbit

Skin irritation: Species: Rabbit. Classification: irritating. Exposure time: 24 h

Eye irritation: Species: rabbit eye. Classification: irritating
Repeated dose toxicity:
- Species: Rat
- Application Route: Inhalation
- Test substance: Methanol
- Note: Developmental Toxicity NOAEL (maternal toxicity) 10,000 ppm NOAEL (developmental toxicity) 5,000 ppm Skeletal and visceral malformations.

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

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

12. Ecological information

Toxicity

Toxicity to fish:
- LC50: 29,400 mg/l
- Exposure time: 96 h
- Species: Pimephales promelas (fathead minnow)

Toxicity to daphnia and other aquatic invertebrates:
- LC50: 10,000 mg/l
- Exposure time: 24 h
- Species: Daphnia (water flea)

Toxicity to bacteria:
- EC50: 43,000 mg/l
- Exposure time: 5 min
- Species: Photobacterium phosphoreum
- EC50: 40,000 mg/l
- Exposure time: 15 min
- Species: Photobacterium phosphoreum
- EC50: 39,000 mg/l
- Exposure time: 25 min
- Species: Photobacterium phosphoreum

Other adverse effects:
- Additional ecological:
  - Accumulation in aquatic organisms is unlikely.
11. Information

The product is readily degradable in the environment.

13. DISPOSAL CONSIDERATIONS

Product: In accordance with local and national regulations.

14. TRANSPORT INFORMATION

<table>
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<tr>
<th>ADR</th>
<th>UN/ID No.</th>
<th>Description of the goods</th>
<th>Class</th>
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<th>Hazard Identification Number</th>
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Methanol
GC230-4

Version 1.2.2 Revision Date 08/24/2017 Print Date 01/04/2018

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 Scheduling of Medicines and Poisons : Schedule 6

Other international regulations
Notification status
US. Toxic Substances Control Act : On TSCA Inventory
Australia. Industrial Chemical (Notification and Assessment) Act : On the inventory, or in compliance with the inventory
Canada. Canadian Environmental Protection Act (CEPA). Domestic Substances List (DSL) : All components of this product are on the Canadian DSL
Japan. Kashin-Hou Law List : On the inventory, or in compliance with the inventory
Korea. Existing Chemicals Inventory (KECI) : 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:

2. Approved Criteria for Classifying Hazardous Substances [NOHSC:1008(1999)]
3. List of Designated Hazardous Substances [NOHSC:10005(1999)]
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]

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.

Prepared by:
Honeywell Performance Materials and Technologies  Product Stewardship Group

End of Safety Data Sheet