

Methanol (230, 232, 233)

000000011383 Version 1.1 1

Revision Date 11/26/2012

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1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**Product information**

Trade name : Methanol (230, 232, 233)

Number : 000000011383

Use of the Substance/Mixture : Solvent

Importer : Chem-Supply Pty Ltd
38-50 Bedford Street
GILLMAN SA 5013

For further information,
please contact: : Phone: (08) 8440 2000
(Monday-Friday, 9:00am-5:00pm)
Fax: (08) 8440 2001

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
In Australia: +(61)-290372994
(24 hours/day, 7 days/week)

2. HAZARDS IDENTIFICATION**Hazardous classification**

Classified as dangerous goods according to the ADG Code
Classified as hazardous according to criteria of NOHSC.

R-phrase(s)

Highly flammable.
Toxic by inhalation, in contact with skin and if swallowed.
Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.

S-phrase(s)

Keep container tightly closed.
Keep away from sources of ignition - No smoking.
Wear suitable protective clothing and gloves.
In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms : Methyl Alcohol

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Formula : 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

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 : 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.
 Immediate medical attention is required.
 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 : Highly 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:

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Carbon monoxide
 Carbon dioxide (CO₂)
 Formaldehyde

Special protective equipment for firefighters : Wear self-contained breathing apparatus and protective suit.
 Further information : 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 swallow.
 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.
 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).

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 swallow.
 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.

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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

Components	CAS-No.	Value	Control parameters	Update	Basis
Methanol	67-56-1	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

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Use with local exhaust ventilation.

Prevent vapor 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 swallow.
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/freezing point : Note: not applicable

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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/cm ³ at 20 °C
Water solubility	: Note: completely soluble
Ignition temperature	: 464 °C
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. Keep away from direct sunlight.
Incompatible materials to avoid	: Strong oxidizing agents Aluminium Magnesium May attack many plastics, rubbers and coatings.

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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 corrosion/irritation : Species: rabbit
Classification: irritating
Exposure time: 24 h

Serious eye damage/eye irritation : Species: rabbit eye
Result: 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.

Germ cell mutagenicity : Note: In vitro tests did not show mutagenic effects

Germ cell mutagenicity : 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)

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

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
information : Accumulation in aquatic organisms is unlikely.
The product is readily degradable in the environment.

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 No : 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)

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IATA

UN/ID No. : UN 1230
 Description of the goods : Methanol
 Class : 3
 Packing group : II
 Labels : 3 (6.1)
 Packing instruction (cargo aircraft) : 364
 Packing instruction (passenger aircraft) : 352
 Packing instruction (passenger aircraft) : Y341

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

Symbol(s)	: F : T	Highly flammable Toxic
R-phrase(s)	: R11 R23/24/25 R39/23/24/25	Highly flammable. Toxic by inhalation, in contact with skin and if swallowed. Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.
S-phrase(s)	: S 7 S16 S36/37 S45	Keep container tightly closed. Keep away from sources of ignition - No smoking. Wear suitable protective clothing and gloves. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
Further information	: Classified as dangerous goods according to the ADG Code Classified as hazardous according to criteria of NOHSC.	

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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 list.
Environmental Protection Act
(CEPA). Domestic
Substances List (DSL)

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

Korea. Existing Chemicals : On the inventory, or in compliance with the inventory
Inventory (KECI)

Philippines. The Toxic : On the inventory, or in compliance with the inventory
Substances and Hazardous
and Nuclear Waste Control
Act

China. Inventory of Existing : On the inventory, or in compliance with the inventory
Chemical Substances

New Zealand. Inventory of : On the inventory, or in compliance with the inventory
Chemicals (NZIoC), as
published by ERMA New
Zealand

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)]

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Further information

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