

**Dichloromethane****GC299-4**

Version 1.3 3

Revision Date 10/04/2017

Print Date 06/29/2018

**SECTION 1. PRODUCT AND COMPANY IDENTIFICATION**

Product name : Dichloromethane

SDS Number : 000000011394


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****GHS Label elements, including precautionary statements**

Symbol(s) : 

Signal word : Warning

Hazard statements : Causes skin irritation.  
Causes serious eye irritation.  
May cause drowsiness and dizziness.  
Suspected of causing cancer.

Precautionary statements : **Prevention:**  
Obtain special instructions before use.  
Do not handle until all safety precautions have been read and

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understood.

Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.

Wash skin thoroughly after handling.

Use only outdoors or in a well-ventilated area.

Wear protective gloves/protective clothing/eye protection/face protection.

**Response:**

IF ON SKIN: Wash with plenty of soap and water.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

IF exposed or concerned: Get medical advice/ attention.

If skin irritation occurs: Get medical advice/ attention.

If eye irritation persists: Get medical advice/ attention.

Take off contaminated clothing and wash before reuse.

**Storage:**

Store in a well-ventilated place. Keep container tightly closed. Store locked up.

**Disposal:**

Dispose of contents/ container to an approved waste disposal plant.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms : Dichloromethane, Methylene Dichloride, DCM, MC

Formula : CH<sub>2</sub>Cl<sub>2</sub>

Chemical nature : Substance

CAS-No. : 75-09-2

**Hazardous components**

| Chemical name   | CAS-No. | Concentration |
|-----------------|---------|---------------|
| Dichloromethane | 75-09-2 | <= 100%       |

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**4. FIRST AID MEASURES**

- Inhalation : 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.  
Call a physician.
- 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 : Do not induce vomiting without medical advice.  
Never give anything by mouth to an unconscious person.  
Call a physician.
- Notes to physician : Treat symptomatically.

**5. FIREFIGHTING MEASURES**

- Suitable extinguishing media : Dry chemical  
Carbon dioxide (CO<sub>2</sub>)  
Foam  
Cool closed containers exposed to fire with water spray.
- Specific hazards during firefighting : This product is not flammable at ambient temperatures and atmospheric pressure.  
Exposure to decomposition products may be a hazard to health.  
In case of fire hazardous decomposition products may be produced such as:  
Phosgene  
Chlorine (Cl<sub>2</sub>)  
Carbon monoxide  
Carbon dioxide (CO<sub>2</sub>)  
Gaseous hydrogen chloride (HCl).
- Special protective equipment for firefighters : Wear self-contained breathing apparatus and protective suit.

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Further information : HAZCHEM Code: 2Z

**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.  
Isolate the affected area. Confine entry into the affected area to those persons properly protected (see Section 8 of MSDS).  
Ensure adequate ventilation.  
Avoid accumulation of vapours in low areas.  
Remove all sources of ignition.  
Do not swallow.  
Avoid breathing vapours, mist or gas.  
Avoid contact with skin, eyes and clothing.
- Environmental precautions : Prevent further leakage or spillage if safe to do so.  
Do not let product enter 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.  
Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).  
Shovel into suitable container for disposal.  
Dispose of absorbed material in accordance with the regulations.

**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.  
Avoid breathing vapours, mist or gas.  
Avoid contact with skin, eyes and clothing.
- Advice on protection against fire and explosion : The product is not flammable.  
Normal measures for preventive fire protection.  
Keep product and empty container away from heat and sources of ignition.

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Fire or intense heat may cause violent rupture of packages.  
Container hazardous when empty.

#### Storage

Requirements for storage areas and containers : 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.

Materials to avoid : Oxidizing agents, Strong acids and strong bases, Metals, Aluminium, Lithium, Magnesium, Sodium, 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   |
|-----------------|---------|------------------------------------|-----------------------------------|---------|---|
| Dichloromethane | 75-09-2 | TWA : Time Weighted Average (TWA): | 50 ppm<br>174 mg/m3               | 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. | 12 2011 | AU NOEL: Australia. National Workplace OELs (Workplace Exposure Standards for Airborne Contaminants, Appendix A)            |
|                 |         | TWA : Time Weighted Average (TWA): | 50 ppm<br>174 mg/m3               | 08 2005 | AU OEL: Australia. OELs. (Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment) |
|                 |         | SKIN_DES : Skin                    | Can be absorbed                   | 08 2005 | AU OEL: Australia. OELs. (Adopted   |

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|  |  |              |                   |  |   |
|--|--|--------------|-------------------|--|---|
|  |  | designation: | through the skin. |  | National Exposure Standards for Atmospheric Contaminants in the Occupational Environment) |
|--|--|--------------|-------------------|--|---|

#### 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.  
Wear a positive-pressure supplied-air respirator.  
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  
Solvent-resistant gloves  
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.  
Remove and wash contaminated clothing before re-use.  
Do not swallow.  
Avoid breathing vapours, mist or gas.  
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](http://www.aiha.org/insideaiha/GuidelineDevelopment/ERPG/Documents/2011erpgweelhandbook_table-only.pdf).

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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 : sweet mild

pH : Note: Not applicable

Melting point/range : -95 °C

Boiling point/boiling range : 40 °C

Flash point : Note: does not flash

Lower explosion limit : 12 %(V)

Upper explosion limit : 19 %(V)

Vapour pressure : 466.63 hPa  
at 20 °C(68 °F)

Vapour density : 2.9  
Note: (Air = 1.0)

Density : 1.33 g/cm<sup>3</sup>

Water solubility : 13.2 g/l at 25 °C

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Ignition temperature : 556 °C

Molecular weight : 84.94 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.  
Protect from extreme heat and cold.  
Keep away from direct sunlight.Incompatible materials to avoid : Oxidizing agents  
Strong acids and strong bases  
Metals  
Aluminium  
Lithium  
Magnesium  
Sodium  
May attack many plastics, rubbers and coatings.Hazardous decomposition products : In case of fire hazardous decomposition products may be produced such as:  
Phosgene  
Chlorine (Cl<sub>2</sub>)  
Carbon monoxide  
Carbon dioxide (CO<sub>2</sub>)  
Gaseous hydrogen chloride (HCl).**11. TOXICOLOGICAL INFORMATION**Acute oral toxicity : LD50: > 2,000 mg/kg  
Species: Rat  
Method: OECD Test Guideline 401  
Note: No deathsAcute inhalation toxicity : LC50: 14400 ppm  
Exposure time: 7 h



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|                       |  |
|-----------------------|--|
|                       | Species: Mouse   |
| Acute dermal toxicity | : LD50: > 2,000 mg/kg<br>Species: Rat  |
| Skin irritation       | : Species: Rabbit<br>Result: Moderate skin irritation  |
| Eye irritation        | : Species: Rabbit<br>Result: Moderate eye irritation   |
| Genotoxicity in vitro | : Test Method: Ames test<br>Result: positive   |
|                       | : Test Method: In vitro gene mutation study in mammalian cells<br>Cell type: Chinese Hamster Ovary Cells<br>Result: positive |
|                       | : Test Method: Unscheduled DNA synthesis<br>Result: positive<br>Note: Liver cells Mouse                                      |
| Further information   | : Note: Confirmed animal carcinogen with unknown relevance to humans.  |

**12. Ecological information****Toxicity**

|                  |   |
|------------------|---|
| Toxicity to fish | : static test<br>LC50: 310 mg/l<br>Exposure time: 96 h<br>Species: Pimephales promelas (fathead minnow)       |
|                  | : flow-through test<br>LC50: 193 mg/l<br>Exposure time: 96 h<br>Species: Pimephales promelas (fathead minnow) |
|                  | : flow-through test   |

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LC50: 10.95 mg/l  
Exposure time: 96 h  
Species: Oncorhynchus mykiss (rainbow trout)

: static test  
LC50: 220 mg/l  
Exposure time: 96 h  
Species: Lepomis macrochirus (Bluegill sunfish)

Toxicity to daphnia and other aquatic invertebrates : static test  
EC50: 140 mg/l  
Exposure time: 48 h  
Species: Daphnia magna (Water flea)

Toxicity to bacteria : EC50: 1,000 mg/l  
Exposure time: 15 min  
Species: Photobacterium phosphoreum

**13. DISPOSAL CONSIDERATIONS**

Product : In accordance with local and national regulations.

**14. TRANSPORT INFORMATION****ADR**

UN/ID No. : UN 1593  
Description of the goods : DICHLOROMETHANE  
Class : 6.1  
Packing group : III  
Classification Code : T1  
Hazard Identification Number : 60  
Labels : 6.1

**ADG\_ROAD**

UN/ID No. : UN 1593  
Description of the goods : DICHLOROMETHANE  
Class : 6.1

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Packing group : III  
Hazard Identification Number : 60  
Labels : 6.1

**IATA**

UN/ID No. : UN 1593  
Description of the goods : Dichloromethane  
Class : 6.1  
Packing group : III  
Labels : 6.1  
Packing instruction (cargo aircraft) : 663  
Packing instruction (passenger aircraft) : 655  
Packing instruction (passenger aircraft) : Y642

**IMDG**

UN/ID No. : UN 1593  
Description of the goods : DICHLOROMETHANE  
Class : 6.1  
Packing group : III  
Labels : 6.1  
EmS Number 1 : F-A  
EmS Number 2 : S-A

Marine pollutant : no

HAZCHEM Code: 2Z

**15. REGULATORY INFORMATION****National regulatory information**

Standard for the Uniform : Schedule 5  
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

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(Notification and  
Assessment) Act

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:**

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

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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