

## **Dichloromethane**

## GC299-4

Version 1.4 4 Revision Date 11/21/2020 Print Date 08/03/2021

#### **SECTION 1. PRODUCT AND COMPANY IDENTIFICATION**

Product name : Dichloromethane

SDS Number : 000000011394

Product Use Description : Solvent

Manufacturer or supplier's

details

CHEMSUPPLY AUSTRALIA 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 or 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 : CH2Cl2

Chemical nature : Substance

CAS-No. : 75-09-2

**Hazardous components** 

Chemical nameCAS-No.ConcentrationDichloromethane75-09-2<= 100%</td>



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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 (CO2)

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 (CI2) Carbon monoxide Carbon dioxide (CO2)

Gaseous hydrogen chloride (HCI).

for firefighters

Special protective equipment : 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
Dichlorometh ane	75-09-2	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), as amended
		TWA : Time Weighted Average (TWA):	50 ppm 174 mg/m3	12 2011	AU NOEL: Australia. National Workplace OELs (Workplace Exposure Standards for Airborne Contaminants, Appendix A), as amended

#### **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



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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.

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



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pН : Note: Not applicable

Melting point/range : -95 °C

: 40 °C Boiling point/boiling range

: Note: does not flash Flash point

Evaporation rate : Note: No data available

Lower explosion limit : 12 %(V)

Upper explosion limit : 19 %(V)

: 466.63 hPa Vapour pressure

at 20 °C(68 °F)

Vapour density : 2.9

Note: (Air = 1.0)

Density : 1.33 g/cm3

Water solubility : 13.2 g/l at 25 °C

octanol/water

Partition coefficient: n- : Note: No data available

Ignition temperature : 556 °C

Viscosity, dynamic : Note: No data available

Viscosity, kinematic : Note: No data available

Molecular weight : 84.94 g/mol



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#### 10. STABILITY AND REACTIVITY

Chemical stability : Stable under recommended storage conditions.

Possibility of hazardous

Conditions to avoid

reactions

: Hazardous polymerisation does not occur.

: 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 (Cl2) Carbon monoxide Carbon dioxide (CO2)

Gaseous hydrogen chloride (HCI).

### 11. TOXICOLOGICAL INFORMATION

Acute oral toxicity : LD50: > 2,000 mg/kg

Species: Rat

Method: OECD Test Guideline 401

Note: No deaths

Acute inhalation toxicity : LC50: 14400 ppm

Exposure time: 7 h Species: Mouse

Acute dermal toxicity : LD50: > 2,000 mg/kg

Species: Rat



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Skin irritation : Species: Rabbit

Result: Moderate skin irritation

Eye irritation : Species: Rabbit

Result: Moderate eye irritation

Genotoxicity in vitro : Test Method: Ames test

Result: positive

Test Method: In vitro gene mutation study in mammalian cells

Cell type: Chinese Hamster Ovary Cells

Result: positive

: Test Method: Unscheduled DNA synthesis

Result: positive

Note: Liver cells Mouse

Further information : Note: Confirmed animal carcinogen with unknown relevance

to humans.

### 12. Ecological information

## **Toxicity**

Toxicity to fish : static test

LC50: 310 mg/l Exposure time: 96 h

Species: Pimephales promelas (fathead minnow)

: flow-through test LC50: 193 mg/l Exposure time: 96 h

Species: Pimephales promelas (fathead minnow)

: flow-through test LC50: 10.95 mg/l Exposure time: 96 h

Species: Oncorhynchus mykiss (rainbow trout)

: static test LC50: 220 mg/l

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Exposure time: 96 h

Species: Lepomis macrochirus (Bluegill sunfish)

Toxicity to daphnia and other : static test

aquatic invertebrates

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

IATA

UN/ID No. : UN 1593

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Description of the goods : Dichloromethane

Class : 6.1 Packing group : 111 Labels : 6.1 Packing instruction (cargo : 663

aircraft)

Packing instruction : 655

(passenger aircraft)

Packing instruction : Y642

(passenger aircraft)

**IMDG** 

UN/ID No. : UN 1593

Description of the goods : DICHLOROMETHANE

: 6.1 Class Packing group : 111 Labels : 6.1 : F-A EmS Number 1 EmS Number 2 : S-A

Marine pollutant : no

HAZCHEM Code: 2Z

#### 15. REGULATORY INFORMATION

### **National regulatory information**

Standard for the Uniform

Scheduling of Medicines and

Poisons

: Schedule 5

### Other international regulations

**Notification status** 

US. Toxic Substances : On TSCA Inventory

Control Act

(Notification and

Assessment) Act

Australia. Industrial Chemical : On the inventory, or in compliance with the inventory

Canada. Canadian

**Environmental Protection Act** 

(CEPA). Domestic

: All components of this product are on the Canadian DSL

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Substances List (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

(IECSC)

: 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.



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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