

Safety Data Sheet

According to Hazardous Products Regulation (SOR/2015-17)

Revision date: 04.08.2020 Print date: 04.08.2020 Version: 6.5

SECTION 1: Identification

Product identifier

Trade name/designation: Dichloromethane ACS

Product No.: 32667 none/none Synonymes: 75-09-2 CAS No.:

Other means of identification:

Relevant identified uses of the substance or mixture and uses advised against

Recommended Use: For Further Manufacturing Use Only Not for Human or Animal Drug Use Uses advised against:

Details of the supplier of the safety data sheet

Supplier

VWR International

2360 Argentia Road Street Postal code/City Mississauga, Ontario

Canada L5N 5Z7

+1-800-932-5000 toll-free within US/Canada Telephone

Telefax: +1-610-728-2103



Emergency phone number

Telephone +1-613-996-6666 (Canutec, 24 hrs/day, 7 days/week, Canada)

Preparation Information

VWR International - Product Information Compliance

E-mail sds@vwr.com

SECTION 2: Hazard identification

2.1 Classification of the substance or mixture

Classification according to Hazardous Products Regulation (SOR/2015-17)

Hazard classes and hazard categories	Hazard statements
Acute toxicity, category 4, oral	H302
Skin irritation, category 2	H315
Eye irritation, category 2	H319
Carcinogenicity, category 1B	H350
Specific target organ toxicity (single exposure), category 1	H370
Specific target organ toxicity (single exposure), category 3, narcotic effect	H336

2.2 Label elements

Labelling in accordance with (SOR/2015-17)

Hazard pictograms



Signal word: Danger

Hazard statements	
H302	Harmful if swallowed.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H350	May cause cancer.
H370	Causes damage to organs.
H336	May cause drowsiness or dizziness.



Precautionary statements	
P201	Obtain special instructions before use.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352	IF ON SKIN: Wash with plenty of water/
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
	Continue rinsing.
P308+P311	IF exposed or concerned: Call a POISON CENTER/doctor/

Hazards not otherwise classified (HNOC)

none/none

SECTION 3: Composition / information on ingredients

3.1 Substances

Substance name Dichloromethane

 $\begin{tabular}{lll} Molecular formula & CH_2Cl_2 \\ Molecular weight & 84.93 g/mol \\ CAS No. & 75-09-2 \\ \end{tabular}$

SECTION 4: First aid measures

4.1 General information

IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician. If unconscious but breathing normally, place in recovery position and seek medical advice. Never give anything by mouth to an unconscious person or a person with cramps. Change contaminated, saturated clothing. Do not leave affected person unattended.

In case of inhalation

Call a POISON CENTER/doctor. Remove casualty to fresh air and keep warm and at rest. If breathing is irregular or stopped, administer artificial respiration.

In case of skin contact

After contact with skin, wash immediately with plenty of water and soap. Remove contaminated, saturated clothing immediately. In case of skin reactions, consult a physician.

After eye contact

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist. Protect uninjured eye. Remove contact lenses, if present and easy to do. Continue rinsing.

In case of ingestion

If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention. Do NOT induce vomiting. Give nothing to eat or drink.

Self-protection of the first aider

First aider: Pay attention to self-protection!

4.2 Most important symptoms/effects, acute and delayed

no data available



4.3 Indication of any immediate medical attention and special treatment needed

no data available

SECTION 5: Fire fighting measures

5.1 Extinguishing media

Suitable extinguishing media

The product itself does not burn.

Co-ordinate fire-fighting measures to the fire surroundings.

Extinguishing media which must not be used for safety reasons

no restriction

5.2 Specific hazards arising from the chemical

In case of fire may be liberated:

Carbon monoxide

Carbon dioxide (CO2)

Hydrogen chloride (HCl)

5.3 Advice for firefighters

DO NOT fight fire when fire reaches explosives.

Protective equipment and precautions for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing.

Additional information

Do not allow run-off from fire-fighting to enter drains or water courses.

Do not inhale explosion and combustion gases.

Use water spray/stream to protect personnel and to cool endangered containers.

In case of fire: Evacuate area.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

In case of major fire and large quantities: Remove persons to safety.

6.2 Environmental precautions

Discharge into the environment must be avoided.

6.3 Methods and material for containment and cleaning up

Spilled product must never be returned to the original container for recycling. Collect in closed and suitable containers for disposal.

6.4 Additional information

Clear spills immediately.



SECTION 7: Handling and storage

7.1 Precautions for safe handling

Avoid:

Inhalation

Avoid contact with eyes and skin.

Use extractor hood (laboratory).

If handled uncovered, arrangements with local exhaust ventilation have to be used.

If local exhaust ventilation is not possible or not sufficient, the entire working area must be ventilated by technical means.

7.2 Conditions for safe storage, including any incompatibilities

Recommended storage temperature: Ambient temperature

Keep container tightly closed and in a well-ventilated place. Store product under (gas): Nitrogen Do not allow contact with air.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Ingredient	Regulatory	Country	Limit value type	Limit value
(Designation)	information		(country of origin)	
Dichloromethane	CNESST	CA	VEMP	174 mg/m³ - 50 ppm

8.2 Engineering controls

Appropriate engineering controls

Technical measures and the application of suitable work processes have priority over personal protection equipment. If handled uncovered, arrangements with local exhaust ventilation have to be used.

Personal protection equipment (PPE)

Wear suitable protective clothing. When handling with chemical substances, protective clothing must be worn.

Eye/face protection

Eye glasses with side protection

Skin protection

Wear suitable gloves. When handling with chemical substances, protective gloves must be worn. In the case of wanting to use the gloves again, clean them before taking off and air them well. Check leak tightness/impermeability prior to use.



By short-term hand contact

Suitable material: Butyl caoutchouc (butyl rubber)/FKM (fluoro rubber)

Thickness of the glove material: 0,70 mm

Breakthrough time:: > 120 min

By long-term hand contact

Suitable material: Butyl caoutchouc (butyl rubber)/FKM (fluoro rubber)

Thickness of the glove material: 0,70 mm

Breakthrough time:: > 120 min

Respiratory protection

Respiratory protection necessary at: aerosol or mist formation If exposure limits are exceeded or irritation is experienced, NIOSH approved respiratory protection should be worn.

Additional information

Wash hands before breaks and after work. Avoid contact with eyes and skin. When using do not eat, drink or smoke. Provide eye shower and label its location conspicuously.

Environmental exposure controls no data available



SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

(a) Appearance

Physical state: liquid
Color: colorless

(b) Odour: no data available (c) Odour threshold: no data available

Safety relevant basic data

(d) pH: $7 (20 \, ^{\circ}\text{C})$ (e) Melting point/freezing point: $-95 \, ^{\circ}\text{C}$

(f) Initial boiling point and boiling range:

(g) Flash point:

(h) Evaporation rate:

(i) Flammability (solid, gas):

39.8 °C (1013 hPa)

no data available

no data available

not applicable

(j) Flammability or explosive limits

Lower explosion limit: 13 % (v/v)
Upper explosion limit: 22 % (v/v)
(k) Vapour pressure: 475 hPa (20 °C)
(l) Vapour density: 2.93 (20 °C)

(m) Relative density: 1.322 g/cm³ (20 °C)

(n) Solubility(ies)

Water solubility (g/L): ~20 g/l (20 °C)
Soluble (g/L) in Ethanol: no data available

(o) Partition coefficient: n-octanol/water: 1.25 (20 °C)

(p) Auto-ignition temperature: 605 °C (DIN 51794)

(q) Decomposition temperature: no data available

(r) Viscosity

Kinematic viscosity: no data available
Dynamic viscosity: 0.43 mPa*s (20 °C)
(s) Explosive properties: not applicable
(t) Oxidising properties: not applicable

9.2 Other information

Bulk density: no data available
Refraction index: 1.4244 (589 nm; 20 °C)
Dissociation constant: no data available
Surface tension: no data available
Henry's Law Constant: no data available

SECTION 10: Stability and reactivity

10.1 Reactivity

no data available



10.2 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature) .

10.3 Possibility of hazardous reactions

no data available

10.4 Conditions to avoid

no data available

10.5 Incompatible materials

no data available

10.6 Hazardous decomposition products

no data available

10.7 Additional information

no data available

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute effects

Acute oral toxicity:

LD50: > 1600 mg/kg - Rat - (RTECS)

LDLo: > 357 mg/kg - Human - (RTECS)

Acute dermal toxicity:

LD50: < 2000 mg/kg - Rat - (OECD 402)

Acute inhalation toxicity:

LC50: 53 mg/l - Rat - (Japan GHS Basis for Classification Data)

Irritant and corrosive effects

Primary irritation to the skin:

Causes skin irritation.

Irritation to eyes:

Causes serious eye irritation.

Irritation to respiratory tract:

not applicable



Respiratory or skin sensitization

In case of skin contact: not sensitising In case of inhalation: not sensitising

STOT-single exposure

May cause drowsiness or dizziness.

STOT-repeated exposure

not applicable

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Carcinogenicity

The table below indicates whether each agency has listed any ingredient as a carcinogen.

no data available	ACGIH	IARC	NTP	OSHA

Germ cell mutagenicity

No indications of human germ cell mutagenicity exist.

Reproductive toxicity

No indications of human reproductive toxicity exist.

Aspiration hazard

not applicable

Other adverse effects

no data available

Additional information

no data available

SECTION 12: Ecological information

12.1 Ecotoxicity

Fish toxicity:

LC50: 310 mg/l (96 h) - Alexander, H.C., W.M. McCarty, and E.A. Bartlett 1978. Toxicity of Perchloroethylene, Trichloroethylene, 1,1,1-Trichloroethane, and Methylene Chloride to Fathead Minnows. Bull.Environ.Contam.Toxicol. 20(3):344-352 (OECDG Data File)

Daphnia toxicity:

EC50: 1470 mg/l (48 h) - Bringmann, G., and F. Meinck 1964. Wassertoxikologische Beurteilung von Industrieabwassern. Gesundheits-Ingenieur 85:229-260 (OECDG Data File)

LC50: 164 mg/l (48 h) - Burton, D.T., and D.J. Fisher 1990. Acute Toxicity of...Methylene Chloride, and 2,4,6-Trichlorophenol to Juvenile Grass Shrimp and Killifish. Bull.Environ.Contam.Toxicol. 44(5):776-783



Algae toxicity:

no data available

Bacteria toxicity:

no data available

12.2 Persistence and degradability

no data available

12.3 Bioaccumulative potential

Partition coefficient: n-octanol/water: 1.25 (20 °C)

12.4 Mobility in soil:

no data available

12.5 Results of PBT/vPvB assessment

This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.

12.6 Other adverse effects

no data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Appropriate disposal / Product

Dispose according to legislation. Consult the appropriate local waste disposal expert about waste disposal.

Waste code product: 070103

Appropriate disposal / Package

Dispose according to legislation. Handle contaminated packages in the same way as the substance itself.

Additional information

no data available

SECTION 14: Transport information

Land transport (TDG)

UN-No.: 1593

Proper Shipping Name: DICHLOROMETHANE

Class(es): 6.1
Packing group: III
Environmental hazards: No
Marine pollutant: No

Special precautions for user:



Sea transport (IMDG)

UN-No.: 1593

Proper Shipping Name: DICHLOROMETHANE

Class(es): 6.1

Classification code:

Hazard label(s): 6.1
Packing group: III
Environmental hazards: No
Marine pollutant: No

Special precautions for user:

Segregation group: 10
EmS-No. F-A S-A

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

not relevant

Air transport (ICAO-TI / IATA-DGR)

UN-No.: 1593

Proper Shipping Name: DICHLOROMETHANE

Class(es): 6.1

Classification code:

Hazard label(s): 6.1 Packing group: III

Special precautions for user:

SECTION 15: Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture

Domestic Substance List:



SECTION 16: Other information

Abbreviations and acronyms

ACGIH - American Conference of Governmental Industrial Hygiensts

DOT - Department of Transportation

IARC - International Agency for Research on Cancer

IATA-DGR - International Air Transport Association-Dangerous Goods Regulations

ICAO-TI - International Civil Aviation Organization-Technical Instructions

IMDG - International Maritime Code for Dangerous Goods

LTV - Long Term Value

NIOSH - National Institute for Occupational Safety and Health

NTP - National Toxicology Program

OSHA - Occupational Safety & Health Administration

PBT - Persistent, Bioaccumulative and Toxic

PEL - Permissible Exposure Limit

STV - Short Term Value

SVHC - Substances of Very High Concern

TDG - Transport of Dangerous Goods

TLV - Threshold Limit Value

vPvB - very Persistent, very Bioaccumulative

Training advice: Provide adequate information, instruction and training for operators.

Additional information

Indication of changes general update

If you need an explanation of the change, contact the supplier.

(SDS@avantorsciences.com)

The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guidance. The information in this document is based on the present state knowledge and is applicable to the product with regard to appropriate safty precautions. It does not represent any guarantee of the properties of the product. VWR International and his Affiliates shall not be held liable for any damage resulting from handling.