



Safety Data Sheet

Revision Date: 14-aug-2013

Version No.: 1

1. Identification of the substance/mixture and of the company/undertaking

Trade name/designation Dichloromethane (DCM), Universal Chromatography Grade
Product No. BDH23373 (VWR International)
Substance name Dichloromethane
CAS No. 75-09-2
Other means of identification Methylene chloride
Relevant identified uses for laboratory use and chemical production.

Supplier (manufacturer/importer/only representative/downstream user/distributor)

VWR International LLC

Street 100 Matsonford Road
Radnor Corporate Center, Building One, Suite 200
P. O. Box 6660
Postal code/city Radnor, PA 19087
country United States of America
Telephone +1-800-932-5000 toll-free within US/CA
+1-610-386-1700
Telefax +1-610-728-2103
E-mail NAMSDS@vwr.com

1.4 Emergency telephone

Telephone +1-800-424-9300 (Chemtrec, 24 hrs/day, 7 days/week, USA)
+1-613-966-6666 (Canutec, 24 hrs/day, 7 days/week, Canada)

2. Hazards identification

Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

hazard classes and hazard categories	Hazard Statements	classification procedure	remark
Carcinogenicity, category 2	H351		

Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]



Signal word

Warning

Hazard Statements

H351	Suspected of causing cancer.
------	------------------------------

Precautionary statements

P201	Obtain special instructions before use.
P281	Use personal protective equipment as required.
P308+P313	IF exposed or concerned: Get medical advice/attention.

2.3 Other hazards

SVHC

No

OSHA hazards

Carcinogen, Target Organ Effect, Irritant

Target Organs

Liver, pancreas, Blood, Central nervous system, Heart, Kidney

HMIS Classification

Health hazard: 2
Chronic health hazard: *
Flammability: 0
Physical hazards: 0

NFPA Rating

Health hazard: 2
Fire: 0
Reactivity hazard: 0

WHMIS Classification

D1B Toxic Material Causing Immediate and Serious Toxic Effects - Toxic
D2A Very Toxic Material Causing Other Toxic Effects - Chronic toxicity
D2B Toxic Material Causing Other Toxic Effects - Carcinogen; Specific target organ toxicity single exposure; Moderate skin irritant; Moderate eye irritant

3. Composition/ Information on ingredients

Molecular formula	CH ₂ Cl ₂
Molecular weight (g/mol)	84.93 g/mol
CAS No.	75-09-2
EC No	200-838-9
INDEX no.	602-004-00-3

4. First-aid measures

General information

IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician. If unconscious 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.

After inhalation

Call a POISON CENTER or doctor/physician. 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.

After 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!

4.7 Information to physician:

Symptoms	No data available
Hazards	No data available
Treatment	No data available

5. Firefighting measures

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

Special hazards arising from the substance or mixture

In case of fire may be liberated: Carbon dioxide (CO₂) Carbon monoxide Hydrogen chloride (HCl) Sulphur oxides

Advice for firefighters

DO NOT fight fire when fire reaches explosives. In case of fire: Wear self-contained breathing apparatus.

Additional information

Do not allow run-off from fire-fighting to enter drains or water courses. Do not inhale explosion and combustion gases. Use caution when applying carbon dioxide in confined spaces. Carbon dioxide can displace oxygen. Use water spray jet to protect personnel and to cool endangered containers.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Avoid generation of dust. Do not breathe dust. Provide adequate ventilation. Wear breathing apparatus if exposed to vapours/dusts/aerosols. Avoid contact with skin, eyes and clothes.

Environmental precautions

Do not allow to enter into surface water or drains.

Methods and material for containment and cleaning up

Spilled product must never be returned to the original container for recycling. Clean contaminated objects and areas thoroughly observing environmental regulations. Collect in closed and suitable containers for disposal. Suitable material for taking up: Absorbing material, organic.

Additional information

Clear spills immediately.

7. Handling and storage

Precautions for safe handling

Avoid: Inhalation. Avoid contact with skin and eyes. 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.

Conditions for safe storage, including any incompatibilities

storage temperature 15-25°C

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

Specific end use(s)

No data available

8. Exposure controls / Personal protection

ACGIH TWA 50 ppm

OSHA PEL 25 ppm

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 protective equipment

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

Eye / face protection

Wear safety glasses with side protection.

Skin protection

When handling with chemical substances, chemical resistant, impermeable protective gloves should be worn. In the case of wanting to use the gloves again, clean them before taking off and air them well.

Protective clothing

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

Respiratory protection

Respiratory protection necessary at: aerosol or mist formation

Additional information

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

9. Physical and chemical properties

Information on basic physical and chemical properties

(a) Appearance	
Physical state	liquid
Colour	colourless
(b) Odour	No data available
(c) Odour threshold	No data available
Safety relevant basic data	
(d) pH	7 (20°C)
(e) Melting point/freezing point	-95°C
(f) Initial boiling point and boiling range	39.8°C (1013 hPa)
(g) Flash point	No data available
(h) Evaporation rate	No data available
(i) Flammability (solid, gas)	not applicable
(j) Upper/lower flammability or explosive limits	
Lower explosion limit (Vol-%)	13
Upper explosion limit (Vol-%)	22
(k) Vapour pressure	475 hPa (20°C)
(l) Vapour density	2.93 (20)
(m) Relative density	1.322 g/cm ³ (20°C)
(n) Solubility(ies)	
Water solubility (g/l)	~ 20 g/l (20°C)
at °C:	20
Soluble (g/l) in	No data available
(o) Partition coefficient: n-octanol/water	1.25 (20°C)
(p) Auto-ignition temperature	605°C
(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

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 constant	No data available

10. Stability and reactivity

Reactivity
No data available

Chemical stability
No data available

Possibility of hazardous reactions
No data available

Conditions to avoid
No data available

Incompatible materials
No data available

Hazardous decomposition products
No data available

Additional information
No data available

11. Toxicological information

Information on toxicological effects

Acute effects

Acute oral toxicity

Effective dose
species: LDLo: 357 mg/kg
human

Exposure time

remark

source RTECS

Acute dermal toxicity

Effective dose
species: LD50: Min. 2000 mg/kg
rat

Exposure time
remark
source OECD 402
Acute inhalation toxicity
Effective dose No data available
species: No data available
Exposure time
remark
source

Irritant and corrosive effects

Primary irritation to the skin

Exposure time
species:
Result

Irritation to eyes

Exposure time
species:
Result

Irritation to respiratory tract

Exposure time
species:
Result

Sensitization

In case of skin contact Not sensitizing.
After inhalation Not sensitizing.

Specific target organ toxicity (single exposure)

Not relevant

Specific target organ toxicity (repeated exposure)

Not relevant

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Carcinogenicity

Suspected of causing cancer.

Germ cell mutagenicity/Genotoxicity

No indications of human germ cell mutagenicity exist.

Reproductive toxicity

No indications of human reproductive toxicity exist.

Aspiration hazard

Not relevant

Other adverse effects
No data available

Additional information
No data available

12. Ecological information

Ecotoxicity

Acute (short-term) fish toxicity

LC50: No data available

EC50

species:

Exposure time

Chronic (long-term) fish toxicity

LC50: No data available

EC50

species:

Exposure time

Acute (short-term) daphnia toxicity

LC50: No data available

EC50

species:

Exposure time

Chronic (long-term) daphnia toxicity

LC50: No data available

EC50

species:

Exposure time

Acute (short-term) algae toxicity

LC50: No data available

EC50

species:

Exposure time

Chronic (long-term) algae toxicity

LC50: No data available

EC50

species:

Exposure time

Persistence and degradability

No data available

Bioaccumulative potential

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

Mobility in soil

No data available

Results of PBT assessment
No data available

Other adverse effects
No data available

13. Disposal considerations

Waste treatment methods

Appropriate disposal / Product

Dispose in accordance with applicable federal, state and local regulations.

Waste code product 07 01 03 (organic halogenated solvents, washing liquids and mother liquors)

Appropriate disposal / Package

Additional information
No data available

14. Transport information

Land transport (ADR/RID)

UN-No.	1593
Proper Shipping Name	DICHLOROMETHANE
Class(es)	6.1
Classification code:	T1
Packing group	III
Hazard label(s)	6.1

Sea transport (IMDG)

UN-No.	1593
Proper Shipping Name	DICHLOROMETHANE
Class(es)	6.1
Classification code:	T1
Packing group	III
Marine pollutant	
Segregation group	

Air transport (ICAO-TI / IATA-DGR)

UN-No.	1593
Proper Shipping Name	DICHLOROMETHANE
Class(es)	6.1
Classification code:	T1
Packing group	III

Additional information
No data available

15. Regulatory information

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

OSHA Hazards

Carcinogen, Target Organ Effect, Irritant

SARA 302 Components

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

The following components are subject to reporting levels established by SARA Title III, Section 313: Methylene chloride - CAS-No. 75-09-2 - Revision Date 2007-07-01

SARA 311/312 Hazards

Acute Health Hazard, Chronic Health Hazard

Chemical Safety Assessment

No data available

16. Other information

HMIS Classification

Health hazard:	2
Chronic health hazard:	*
Flammability:	0
Physical hazards:	0

NFPA Rating

Health hazard:	2
Fire:	0
Reactivity hazard:	0

WHMIS Classification

D1B	Toxic Material Causing Immediate and Serious Toxic Effects - Toxic
D2A	Very Toxic Material Causing Other Toxic Effects - Chronic toxicity
D2B	Toxic Material Causing Other Toxic Effects - Carcinogen; Specific target organ toxicity single exposure; Moderate skin irritant; Moderate eye irritant

H351	Suspected of causing cancer.
------	------------------------------

SVHC

No

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.