

Dichloromethane, GC reference standard

Revision: 15.08.2025

Product code: AC18.13446

Page 1 of 13

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

Dichloromethane, GC reference standard

Substance name: dichloromethane; methylene chloride
REACH Registration Number: 01-2119480404-41-XXXX
CAS No: 75-09-2
Index No: 602-004-00-3
EC No: 200-838-9

1.2. Relevant identified uses of the substance or mixture and uses advised against**Use of the substance/mixture**

Reagents and laboratory chemicals
Only for laboratory and analysis purposes.

Uses advised against

Do not use for private purposes (household).

1.3. Details of the supplier of the safety data sheet**Details of the supplier of the safety data sheet**

Company name: AnalytiChem Services, Unipessoal, Lda
Street: Rua de Júlio Dinis 676 7º
Place: N-4050-320 Porto
Telephone: +351 226002917
E-mail: info@analytichem.com
Contact person: SDS service department
E-mail: SDS@analytichem.com
Internet: www.analytichem.com
Responsible Department: SDS service department

Supplier or manufacturer details

Company name: AnalytiChem Belgium NV
Street: Industriezone "De Arend" 2
Place: B-8210 Zedelgem
Telephone: +32 50 28 83 20
E-mail: info.be@analytichem.com
Contact person: SDS service department
E-mail: SDS@analytichem.com
Responsible Department: AnalytiChem:
EU-Belgium: AnalytiChem Belgium, Industriezone "De Arend" 2, 8210 Zedelgem, Belgium, +32 50 28 83 20
EU-Germany: AnalytiChem Germany, Stempelstrasse 6, 47167 Duisburg, Germany, +49 203 51 94 – 200
EU-Netherlands: AnalytiChem Netherlands, Communicatieweg 7, 3641 SG Mijdrecht, The Netherlands, +31 297 286848
UK: AnalytiChem UK, Unit 7 Launton Business Center, Murdock Road, Bicester, OX26 4XB, England, +44 1869 355 500
USA: AnalytiChem USA, 227 China Road, Winslow, Maine, 04901, United States, +1 800-244-8378
Canada: AnalytiChem Canada, 21800 Clark Graham Avenue, Baie d'Urfe, H9X 4B6, Canada, +1 514-457-0701
Australia: ORE Research & Exploration Pty Ltd, 37A Hosie Street, Bayswater North, 3153, Australia, +61 3 9729 0333

Dichloromethane, GC reference standard

Revision: 15.08.2025

Product code: AC18.13446

Page 2 of 13

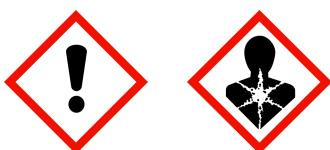
1.4. Emergency telephone number: +44 20 3807 3798 (CHEMTREC)**Further Information**

No data available

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****Regulation (EC) No 1272/2008**

Carc. 2; H351
Skin Irrit. 2; H315
Eye Irrit. 2; H319
STOT SE 3; H336

Full text of hazard statements: see SECTION 16.

2.2. Label elements**Regulation (EC) No 1272/2008****Signal word:** Warning**Pictograms:****Hazard statements**

H315	Causes skin irritation.
H319	Causes serious eye irritation.
H351	Suspected of causing cancer.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H373	May cause damage to organs (kidneys, liver, blood) through prolonged or repeated exposure.

Precautionary statements

P201	Obtain special instructions before use.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P302+P352	IF ON SKIN: Wash with plenty of water.
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+P313	IF exposed or concerned: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.

2.3. Other hazards

No data available

SECTION 3: Composition/information on ingredients**3.1. Substances**Sum formula: CH₂Cl₂

Molecular weight: 84,93 g/mol

Dichloromethane, GC reference standard

Revision: 15.08.2025

Product code: AC18.13446

Page 3 of 13

Relevant ingredients

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (Regulation (EC) No 1272/2008)			
75-09-2	dichloromethane			100 %
	200-838-9	602-004-00-3	01-2119480404-41-XXXX	
	Carc. 2, Skin Irrit. 2, Eye Irrit. 2, STOT SE 3; H351 H315 H319 H336			

Full text of H and EUH statements: see section 16.

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
	Specific Conc. Limits, M-factors and ATE		
75-09-2	200-838-9	dichloromethane	100 %
	dermal: LD50 = > 2000 mg/kg; oral: LD50 = > 2000 mg/kg		

Further Information

This product does not contain substances of very high concern according to Regulation (EC) No 1907/2006 (REACH), Article 57 above the respective regulatory concentration limit of = 0.1 % (w/w).

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

First aider: Pay attention to self-protection!

After inhalation

Provide fresh air.

Call a physician immediately.

After contact with skin

Wash immediately with: Water

Take off immediately all contaminated clothing and wash it before reuse.

Call a physician immediately.

After contact with eyes

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.

Remove contact lenses, if present and easy to do. Continue rinsing.

Protect uninjured eye.

After ingestion

Observe risk of aspiration if vomiting occurs.

Call a physician immediately.

4.2. Most important symptoms and effects, both acute and delayed

Irritant, Vapours may cause drowsiness and dizziness.

Dizziness, Inebriation

Gastrointestinal complaints, Vomiting

Unconsciousness, Cough

Respiratory complaints, Dyspnoea

Corneal opacity. Circulatory collapse

Liver and kidney damage

4.3. Indication of any immediate medical attention and special treatment needed

No data available

Dichloromethane, GC reference standard

Revision: 15.08.2025

Product code: AC18.13446

Page 4 of 13

SECTION 5: Firefighting measures**5.1. Extinguishing media****Suitable extinguishing media**

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

Unsuitable extinguishing media

no restriction

5.2. Special hazards arising from the substance or mixture

Non-combustible liquids

Hazardous combustion products

In case of fire may be liberated:

Hydrogen chloride (HCl)

Phosgene

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.

In case of fire and/or explosion do not breathe fumes.

Avoid contact with skin, eyes and clothes.

Additional information

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

Move undamaged containers from immediate hazard area if it can be done safely.

Use water spray jet to protect personnel and to cool endangered containers.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures****General advice**

Do not breathe vapour/aerosol.

For non-emergency personnel

Provide adequate ventilation.

Use personal protection equipment.

Avoid contact with skin, eyes and clothes.

Remove persons to safety.

Emergency procedures

Consult an expert

Do not breathe dust/fume/gas/mist/vapours/spray.

For emergency responders

Precautionary statements For emergency responders : Personal protection equipment: see section 8

6.2. Environmental precautions

Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up**For containment**

Cover drains.

Prevent spread over a wide area (e.g. by containment or oil barriers).

Collect in closed and suitable containers for disposal.

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).

For cleaning up

Clean contaminated articles and floor according to the environmental legislation.

Other information

Provide adequate ventilation.

Do not breathe dust/fume/gas/mist/vapours/spray.

Dichloromethane, GC reference standard

Revision: 15.08.2025

Product code: AC18.13446

Page 5 of 13

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

SECTION 7: Handling and storage**7.1. Precautions for safe handling****Advice on safe handling**

Avoid exposure - obtain special instructions before use.

Read label before use. Handle and open container with care.

When using do not eat, drink, smoke, sniff. Use personal protection equipment.

Provide adequate ventilation. Avoid contact with skin, eyes and clothes.

Do not breathe vapour/aerosol. Use extractor hood (laboratory).

Advice on protection against fire and explosion

Usual measures for fire prevention.

Advice on general occupational hygiene

Keep away from food, drink and animal feedingstuffs. Remove contaminated, saturated clothing immediately.

Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat or drink. Avoid: aerosol or mist formation Do not breathe vapour/aerosol.

Further information on handling

Draw up and observe skin protection programme.

Wash hands and face before breaks and after work and take a shower if necessary.

Take off immediately all contaminated clothing and wash it before reuse.

7.2. Conditions for safe storage, including any incompatibilities**Requirements for storage rooms and vessels**

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

Store in a place accessible by authorized persons only.

Protect against: Light

Hints on joint storage

Take national regulations into account.

Further information on storage conditions

Keep container tightly closed.

storage temperature +2°C - +25°C

7.3. Specific end use(s)

Laboratory chemicals

SECTION 8: Exposure controls/personal protection**8.1. Control parameters****Exposure limits (EH40)**

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
75-09-2	Dichloromethane	100 200	353 706		TWA (8 h) STEL (15 min)	WEL WEL

Dichloromethane, GC reference standard

Revision: 15.08.2025

Product code: AC18.13446

Page 6 of 13

Biological Monitoring Guidance Values (EH40)

CAS No	Substance	Parameter	Value	Test material	Sampling time
75-09-2	Dichloromethane	carbon monoxide	30 ppm	end-tidal breath	Post shift

DNEL/DMEL values

CAS No	Substance	DNEL type	Exposure route	Effect	Value
75-09-2	dichloromethane				
Worker DNEL, long-term		inhalation	systemic	353 mg/m ³	
Worker DNEL, acute		inhalation	systemic	706 mg/m ³	
Worker DNEL, long-term		dermal	systemic	12 mg/kg bw/day	
Consumer DNEL, long-term		inhalation	systemic	88,3 mg/m ³	
Consumer DNEL, acute		inhalation	systemic	353 mg/m ³	
Consumer DNEL, long-term		dermal	systemic	5,82 mg/kg bw/day	
Consumer DNEL, long-term		oral	systemic	0,06 mg/kg bw/day	

PNEC values

CAS No	Substance	Environmental compartment	Value
75-09-2	dichloromethane		
Freshwater			0,31 mg/l
Freshwater (intermittent releases)			0,27 mg/l
Marine water			0,031 mg/l
Freshwater sediment			2,57 mg/kg
Marine sediment			0,26 mg/kg
Micro-organisms in sewage treatment plants (STP)			26 mg/l
Soil			0,33 mg/kg

8.2. Exposure 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.

Individual protection measures, such as personal protective equipment

Eye/face protection

goggles

Wear eye/face protection.

Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Suitable examples are gloves of KCL GmbH, D-36124 Eichenzell, e-mail: vertrieb@kcl.de with the following specification (test according to EN 374):

Dichloromethane, GC reference standard

Revision: 15.08.2025

Product code: AC18.13446

Page 7 of 13

By long-term hand contact: No data available

By short-term hand contact

Trade name/designation: KCL 890 Vitoject®

Recommended material: FKM (fluoro rubber) 0,7 mm

Wearing time with occasional contact (splashes): > 120 min

The breakthrough times stated above were determined by KCL in laboratory tests acc. to EN374 with samples of the recommended glove types. This recommendation applies only to the product stated in the safety data sheet supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

Skin protection

Wear suitable protective clothing. Take off immediately all contaminated clothing.

Wash hands before breaks and after work.

The choice of body protection depends on the concentration and quantity of hazardous substances. The chemical resistance of protective agents must be clarified with their suppliers.

Respiratory protection

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

Filtering device with filter or ventilator filtering device of type: AX

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

Thermal hazards

No data available

Environmental exposure controls

Do not allow to enter into surface water or drains.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Physical state:	Liquid
Colour:	clear
Odour:	characteristic
Odour threshold:	No data available
Melting point/freezing point:	-95 °C
Boiling point or initial boiling point and boiling range:	40 °C
Flammability:	No data available
Lower explosion limits:	13 vol. %
Upper explosion limits:	22 vol. %
Flash point:	X
Auto-ignition temperature:	605 °C
Decomposition temperature:	>120 °C
pH-Value (at 20 °C):	neutral
Viscosity / Kinematic:	No data available
Water solubility: (at 20 °C)	20 g/l
Solubility in other solvents	
No data available	

Dichloromethane, GC reference standard

Revision: 15.08.2025

Product code: AC18.13446

Page 8 of 13

Dissolution rate:	No data available
Partition coefficient n-octanol/water:	No data available
Dispersion stability:	No data available
Vapour pressure:	475 hPa
(at 20 °C)	
Vapour pressure:	No data available
Density:	1,336 g/cm ³
Relative density:	No data available
Bulk density:	No data available
Relative vapour density:	No data available
Particle characteristics:	No data available

9.2. Other information**Information with regard to physical hazard classes**

Explosive properties	
No data available	
Sustained combustibility:	No data available
Self-ignition temperature	
Solid:	No data available
Gas:	No data available

Other safety characteristics

Evaporation rate:	No data available
Solvent separation test:	No data available
Solvent content:	No data available
Solid content:	0%
Sublimation point:	No data available
Softening point:	No data available
Pour point:	No data available
No data available:	
Viscosity / dynamic:	0,43 mPa·s
(at 20 °C)	
Flow time:	No data available

Further Information

Corrosive to metals.

SECTION 10: Stability and reactivity**10.1. Reactivity**

No data available

10.2. Chemical stability

Nitrogen oxides (NOx) Protect against: Light

10.3. Possibility of hazardous reactions

Alkali metals
Alkaline earth metal
Nitric acid
Amines
Hydrocarbons, aromatic
K, Na, Al

10.4. Conditions to avoid

No data available

Dichloromethane, GC reference standard

Revision: 15.08.2025

Product code: AC18.13446

Page 9 of 13

10.5. Incompatible materials

Rubber articles
plastics
metals
Light metal
Steel

10.6. Hazardous decomposition products

In case of fire may be liberated:
SECTION 5: Firefighting measures

Further information

No data available

SECTION 11: Toxicological information**11.1. Information on hazard classes****Toxicokinetics, metabolism and distribution**

Avoid exposure - obtain special instructions before use.

Acute toxicity

Based on available data, the classification criteria are not met.

Pulmonary oedema

Pneumonia

Mucous membrane irritation in the mouth, throat, esophagus and gastrointestinal tract.

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
75-09-2	dichloromethane				
	oral	LD50 mg/kg	> 2000 Rat	Other company data (1988)	OECD Guideline 401
	dermal	LD50 mg/kg	> 2000 Rat	Other company data (1988)	OECD Guideline 402

Irritation and corrosivity

Skin corrosion/irritation: Causes skin irritation.

Serious eye damage/eye irritation: Causes serious eye irritation.

Has degreasing effect on the skin. Dermatitis

Sensitising effects

Based on available data, the classification criteria are not met.

Carcinogenic/mutagenic/toxic effects for reproduction

Suspected of causing cancer. (dichloromethane)

Germ cell mutagenicity: Based on available data, the classification criteria are not met.

Reproductive toxicity: Based on available data, the classification criteria are not met.

STOT-single exposure

May cause respiratory irritation.

May cause drowsiness or dizziness. (dichloromethane)

STOT-repeated exposure

May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard

Based on available data, the classification criteria are not met.

Information on likely routes of exposure

No data available

Dichloromethane, GC reference standard

Revision: 15.08.2025

Product code: AC18.13446

Page 10 of 13

Specific effects in experiment on an animal

No data available

Additional information on tests

No data available

Practical experience

No data available

11.2. Information on other hazards**Endocrine disrupting properties**

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

Other information

No data available

Further information

Irritant, Vapours may cause drowsiness and dizziness.

Dizziness, Inebriation

Gastrointestinal complaints, Vomiting

Unconsciousness, Cough

Respiratory complaints, Dyspnoea

Corneal opacity. Circulatory collapse

Liver and kidney damage

SECTION 12: Ecological information**12.1. Toxicity**

Based on available data, the classification criteria are not met.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
75-09-2	dichloromethane					
	Acute fish toxicity	LC50 193 mg/l	96 h	Pimephales promelas	Bull Environ Contam Toxicol 20, 344-352	According to test methods described by t
	Acute crustacea toxicity	EC50 27 mg/l	48 h	Daphnia magna	Study report (1979)	According EPA publication
	Fish toxicity	NOEC 357 mg/l	8 d	Pimephales promelas	Bull Environ Contam Toxicol 39, 869-876 (other: ASTM E729-80

12.2. Persistence and degradability

68 %; 28 d; aerob

OECD 301D

Readily biodegradable (according to OECD criteria).

12.3. Bioaccumulative potential

No indication of bioaccumulation potential.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
75-09-2	dichloromethane	1,25

BCF

CAS No	Chemical name	BCF	Species	Source
75-09-2	dichloromethane	> 0,91 - < 7,9		Washington, DC, US E

Dichloromethane, GC reference standard

Revision: 15.08.2025

Product code: AC18.13446

Page 11 of 13

12.4. Mobility in soil

log Koc: 1,00

12.5. Results of PBT and vPvB assessment

This substance does not meet the PBT/vPvB criteria of UK REACH.

12.6. Endocrine disrupting properties

This substance does not have endocrine disrupting properties with respect to non-target organisms.

12.7. Other adverse effects

Discharge into the environment must be avoided.

Further information

Do not allow to enter into surface water or drains.

SECTION 13: Disposal considerations**13.1. Waste treatment methods****Disposal recommendations**

Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.

Send to a physico-chemical treatment facility under observation of official regulations.

Do not empty into drains.

Contaminated packaging

Handle contaminated packages in the same way as the substance itself.

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

Dispose of waste according to "Kreislaufwirtschafts- und Abfallgesetz (KrW-/AbfG)".

SECTION 14: Transport information**Land transport (ADR/RID)**

<u>14.1. UN number or ID number:</u>	UN 1593
<u>14.2. UN proper shipping name:</u>	DICHLOROMETHANE
<u>14.3. Transport hazard class(es):</u>	6.1
<u>14.4. Packing group:</u>	III
Hazard label:	6.1
Classification code:	T1
Special Provisions:	516
Limited quantity:	5 L
Excepted quantity:	E1
Transport category:	2
Hazard No:	60
Tunnel restriction code:	E

Inland waterways transport (ADN)

<u>14.1. UN number or ID number:</u>	UN 1593
<u>14.2. UN proper shipping name:</u>	DICHLOROMETHANE
<u>14.3. Transport hazard class(es):</u>	6.1
<u>14.4. Packing group:</u>	III
Hazard label:	6.1
Classification code:	T1
Special Provisions:	516 802
Limited quantity:	5 L
Excepted quantity:	E1

Marine transport (IMDG)

<u>14.1. UN number or ID number:</u>	UN 1593
---	---------

Dichloromethane, GC reference standard

Revision: 15.08.2025

Product code: AC18.13446

Page 12 of 13

14.2. UN proper shipping name:	DICHLOROMETHANE
14.3. Transport hazard class(es):	6.1
14.4. Packing group:	III
Hazard label:	6.1
Special Provisions:	-
Limited quantity:	5 L
Excepted quantity:	E1
EmS:	F-A, S-A
Air transport (ICAO-TI/IATA-DGR)	
14.1. UN number or ID number:	UN 1593
14.2. UN proper shipping name:	DICHLOROMETHANE
14.3. Transport hazard class(es):	6.1
14.4. Packing group:	III
Hazard label:	6.1
Limited quantity Passenger:	2 L
Passenger LQ:	Y642
Excepted quantity:	E1
IATA-packing instructions - Passenger:	655
IATA-max. quantity - Passenger:	60 L
IATA-packing instructions - Cargo:	663
IATA-max. quantity - Cargo:	220 L

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**EU regulatory information**

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 59, Entry 75

Information according to Directive 2012/18/EU (SEVESO III):

Additional information

Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers. Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC).

National regulatory information

Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

Water hazard class (D): 2 - obviously hazardous to water

SECTION 16: Other information

Changes

This data sheet contains changes from the previous version in section(s): 1,6,7,8,9,11,15.

Abbreviations and acronyms

Skin Irrit. 2: Skin irritation, hazard category 2

Eye Irrit. 2: Eye irritation, hazard category 2

Carc. 2: Carcinogenicity, hazard category 2

STOT SE 3: Specific target organ toxicity - single exposure, hazard category 3

STOT RE 2: Specific target organ toxicity - repeated exposure, hazard category 2

Dichloromethane, GC reference standard

Revision: 15.08.2025

Product code: AC18.13446

Page 13 of 13

Relevant H and EUH statements (number and full text)

H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H351	Suspected of causing cancer.
H373	May cause damage to organs (kidneys, liver, blood) through prolonged or repeated exposure.
H373	May cause damage to organs through prolonged or repeated exposure.

Further Information

Provide appropriate information, instructions and training to users

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.

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights.

The receiver of our product is singularly responsible for adhering to existing laws and regulations.