Methylene Chloride

Safety Data Sheet

According to Regulations for Hazardous Chemical Agents, 2021 and United Nations GHS revision 9
Issue date: 9/2/2022 Revision date: 2/21/2025 Supersedes: 2/21/2025 Version: 2.0

SECTION 1: Identification of the substance/mixture and of the supplier/undertaking

1.1. GHS product identifier

Product form	:	Substance
Trade name	:	Methylene Chloride
EC-No.	:	200-838-9
EC Index-No.	:	602-004-00-3
CAS-No.	:	75-09-2
Formula	:	CH2Cl2

1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

No additional information available

1.4. Supplier's details

Kayo Fine Chemicals
Vat. No: 4190233827
Tel. No: 0118933876
Plot 24 Pulp Road
Klippoortjie Agricultural Lots
Germiston

SECTION 2: Hazard identification

2.1. GHS classification of the substance/mixture and any national or regional information

Classification according to the United Nations GHS

Specific target organ toxicity – Repeated exposure, Category 1	H372
Hazardous to the aquatic environment – Chronic Hazard, Category 4	H413

Full text of H-statements: see section 16

Adverse physicochemical, human health and environmental effects : Causes damage to organs through prolonged or repeated exposure,May cause long lasting harmful effects to aquatic life.

2.2. GHS label elements, including precautionary statements

Labelling according to the United Nations GHS

Hazard pictograms (GHS ZA) :

Signal word (GHS-ZA) : Danger

Hazard statements (GHS ZA) : H372 - Causes damage to organs (digestive organs, heart) through prolonged or repeated exposure (Dermal, Inhalation, Oral)
H413 - May cause long lasting harmful effects to aquatic life

Precautionary statements (GHS ZA) : P260 - Do not breathe dusts or mists.
P264 - Wash hands, forearms and face thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.
P273 - Avoid release to the environment.
P319 - Get medical help if you feel unwell.
P501 - Dispose of contents and container to an approved waste disposal plant.

P-statements for label (GHS-ZA) : P260 - Do not breathe dusts or mists.; P264 - Wash hands, forearms and face thoroughly after handling.; P270 - Do not eat, drink or smoke when using this product.; P273 - Avoid release to the environment.; P319 - Get medical help if you feel unwell.; P501 - Dispose of contents and container to an approved waste disposal plant.

2.3. Other hazards which do not result in classification or are not covered by the GHS

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substance

Name : Methylene Chloride
CAS-No. : 75-09-2
EC-No. : 200-838-9
EC Index-No. : 602-004-00-3
Product identifiers: See section 1.1

Name	Product identifier	%	Classification according to the United Nations GHS
dichloromethane; methylene chloride	CAS-No.: 75-09-2	≥ 100	STOT RE 1, H372

Full text of H-statements: see section 16

3.2. Mixture

Not applicable

SECTION 4: First aid measures

4.1. Description of necessary first aid measures

First-aid measures general : Get medical advice/attention if you feel unwell.
First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact : Wash skin with plenty of water.
First-aid measures after eye contact : Rinse eyes with water as a precaution.
First-aid measures after ingestion : Call a poison center or a doctor if you feel unwell.

4.2. Most important symptoms/effect, acute and delayed

Symptoms/effects after inhalation : None under normal conditions.
Symptoms/effects after skin contact : None under normal conditions.
Symptoms/effects after eye contact : None under normal conditions.
Symptoms/effects after ingestion : None under normal conditions.

4.3. Indication of immediate medical attention and special treatment needed, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.
Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

Fire hazard : No fire hazard.
Explosion hazard : No direct explosion hazard.
Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Special protective actions for fire-fighters

Firefighting instructions : Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection.

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material damage.

6.1.1. For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.

Emergency procedures : Ventilate spillage area. Do not breathe dust/fume/gas/mist/vapours/spray.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

Emergency procedures : Evacuate unnecessary personnel. Stop leak if safe to do so.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and materials for containment and cleaning up

For containment : Absorb spilled material with sand or earth. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak without risks if possible.

Methods for cleaning up : Take up liquid spill into absorbent material.

Other information : Dispose of materials or solid residues at an authorized site.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment. Do not breathe dust/fume/gas/mist/vapours/spray.

Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

Additional hazards when processed : Not expected to present a significant hazard under anticipated conditions of normal use.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Keep in a cool, well-ventilated place away from heat.

Storage conditions : Keep cool. Protect from sunlight.

Packaging materials : Store always product in container of same material as original container.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Methylene Chloride (75-09-2)	
South Africa - Occupational Exposure Limits (Maximum Limits)	
Local name	Dichloromethane [methylene chloride]
RHCA - STEL/C	100 ppm
Remark	SKIN (danger of cutaneous absorption), CARC (denotes carcinogenicity, which is based on GHS categorisation, including category 1A and 1B)

Methylene Chloride (75-09-2)	
Regulatory reference	Government Notice No. R. 280, 2021
South Africa - Occupational Exposure Limits (Airborne Pollutants)	
Local name	Methylene chloride (Dichloromethane)
OEL TWA	175 mg/m³
	50 ppm
OEL STEL	780 mg/m³
	250 ppm
Regulatory reference	Government Notice No. R 904

dichloromethane; methylene chloride (75-09-2)	
South Africa - Occupational Exposure Limits (Maximum Limits)	
Local name	Dichloromethane [methylene chloride]
RHCA - STEL/C	100 ppm
Remark	SKIN (danger of cutaneous absorption), CARC (denotes carcinogenicity, which is based on GHS categorisation, including category 1A and 1B)
Regulatory reference	Government Notice No. R. 280, 2021
South Africa - Occupational Exposure Limits (Airborne Pollutants)	
Local name	Methylene chloride (Dichloromethane)
OEL TWA	175 mg/m³
	50 ppm
OEL STEL	780 mg/m³
	250 ppm
Regulatory reference	Government Notice No. R 904
South Africa - Biological limit values	
Local name	Dichloromethane
BEI	0.3 mg/l Parameter: Dichloromethane - Medium: urine - Sampling time: End of shift - Notations: Sq (semi-quantitative)
Regulatory reference	Government Notice No. R. 280, 2021

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.
Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures, such as personal protective equipment

Hand protection : Protective gloves
Eye protection : Safety glasses
Skin and body protection : Wear suitable protective clothing
Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment

Personal protective equipment symbol(s)

8.4. Exposure limit values for the other components

No additional information available

SECTION 9: Physical and chemical properties

9.1. Basic physical and chemical properties

Physical state	:	Liquid
Appearance	:	Liquid.
Colour	:	clear
Odour	:	Ethers, n.o.s.
Odour threshold	:	No data available
pH	:	No data available
pH solution	:	No data available
Relative evaporation rate (butylacetate=1)	:	No data available
Relative evaporation rate (ether=1)	:	No data available
Melting point	:	95 °C
Freezing point	:	No data available
Boiling point	:	≥ 40 °C
Flash point	:	No data available
Auto-ignition temperature	:	605 °C
Decomposition temperature	:	120 °C
Flammability	:	Non flammable.
Vapour pressure	:	No data available
Vapour pressure at 50°C	:	No data available
Relative vapour density at 20°C	:	2.93
Relative density	:	No data available
Relative density of saturated gas/air mixture	:	No data available
Density	:	1.32 g/cm³
Relative gas density	:	No data available
Solubility	:	Water: 13.2 g/l
Partition coefficient n-octanol/water (Log Pow)	:	1.25
Partition coefficient n-octanol/water (Log Kow)	:	7
Viscosity, kinematic	:	No data available
Viscosity, dynamic	:	No data available
Explosive properties	:	No data available
Oxidising properties	:	No data available
Explosive limits	:	No data available
Lower explosion limit	:	450 g/m³
Upper explosion limit	:	780 g/m³
Physical state	:	Liquid
Appearance	:	Liquid.

9.2. Data relevant with regard to physical hazard classes (supplemental)

No additional information available

SECTION 10: Stability and Reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical Stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

dichloromethane; methylene chloride (75-09-2)	
LD50 oral rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)

Skin corrosion/irritation : Not classified
Serious eye damage/irritation : Not classified
Respiratory or skin sensitization : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified
Reproductive toxicity : Not classified
STOT-single exposure : Not classified
STOT-repeated exposure : Causes damage to organs (digestive organs, heart) through prolonged or repeated exposure (Dermal, Inhalation, Oral).

dichloromethane; methylene chloride (75-09-2)	
NOAEL (oral, rat, 90 days)	6 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)
STOT-repeated exposure	Causes damage to organs through prolonged or repeated exposure.

Aspiration hazard : Not classified

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : May cause long lasting harmful effects to aquatic life.
Hazardous to the aquatic environment, short-term (acute) : Not classified
Hazardous to the aquatic environment, long-term (chronic) : May cause long lasting harmful effects to aquatic life.

dichloromethane; methylene chloride (75-09-2)	
LC50 - Fish [1]	193 mg/l Test organisms (species): Pimephales promelas

12.2. Persistence and degradability

Methylene Chloride (75-09-2)	
Persistence and degradability	Not rapidly degradable

dichloromethane; methylene chloride (75-09-2)	
Persistence and degradability	

12.3. Bioaccumulative potential

Methylene Chloride (75-09-2)	
Partition coefficient n-octanol/water (Log Pow)	7
Partition coefficient n-octanol/water (Log Kow)	1.25
Bioaccumulative potential	No additional information available

12.4. Mobility in soil

Methylene Chloride (75-09-2)	
Mobility in soil	No additional information available

12.5. Other adverse effects

Ozone : Not classified
Other adverse effects : No additional information available

SECTION 13: Disposal Considerations

13.1. Disposal methods

Regional waste regulation : Disposal must be done according to official regulations.
Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations : Disposal must be done according to official regulations.
Product/Packaging disposal recommendations : Disposal must be done according to official regulations.
Additional information : Do not re-use empty containers.

SECTION 14: Transport information

In accordance with SANS / IMDG / IATA

SANS	IMDG	IATA
14.1. UN number		
1593	1593	1593
14.2. UN Proper Shipping Name		
DICHLOROMETHANE	DICHLOROMETHANE	Dichloromethane
Transport document description		
Not applicable	UN 1593 DICHLOROMETHANE, 6.1, III	UN 1593 Dichloromethane, 6.1, III
14.3. Transport hazard class(es)		
6.1	6.1	6.1
		
14.4. Packing group, if applicable		
III	III	III
14.5. Environmental hazards		
Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No	Dangerous for the environment : No
No supplementary information available		

14.6. Special precautions for user

SANS

Limited quantities (SANS)	: 5 L
Limited quantities (SANS)	: 5 L
Packagings, large packagings and IBCs Packing instructions (SANS)	: P001, IBC03, LP01
Packagings, large packagings and IBCs Special packing instructions (SANS)	: B8
Portable tank and bulk containers instructions (SANS)	: T7
Portable tank and bulk container special provisions (SANS)	: TP2

IMDG

Limited quantities (IMDG)	: 5 L
Excepted quantities (IMDG)	: E1
Packing instructions (IMDG)	: P001, LP01
IBC packing instructions (IMDG)	: IBC03
IBC special provisions (IMDG)	: B8
Tank instructions (IMDG)	: T7
Tank special provisions (IMDG)	: TP2
EmS-No. (Fire)	: F-A - FIRE SCHEDULE Alfa - GENERAL FIRE SCHEDULE
EmS-No. (Spillage)	: S-A - SPILLAGE SCHEDULE Alfa - TOXIC SUBSTANCES
Stowage category (IMDG)	: A
Segregation (IMDG)	: SGG10
Properties and observations (IMDG)	: Colourless, volatile liquid with heavy vapours. Boiling point: 40°C. When involved in a fire, evolves extremely toxic fumes (phosgene). Toxic if swallowed, by skin contact or by inhalation.

IATA

PCA Excepted quantities (IATA)	: E1
PCA Limited quantities (IATA)	: Y642
PCA limited quantity max net quantity (IATA)	: 2L
PCA packing instructions (IATA)	: 655
PCA max net quantity (IATA)	: 60L
CAO packing instructions (IATA)	: 663
CAO max net quantity (IATA)	: 220L
ERG code (IATA)	: 6L

14.7. Transport in bulk according to IMO instructions

Not applicable

SECTION 15: Regulatory information

15.1. National regulations

15.1.1. OCCUPATIONAL HEALTH AND SAFETY ACT, 1993

Prohibited Hazardous Chemical Agents
Not regulated

15.2. Safety, health, and environmental national regulations specific for the product

No additional information available

SECTION 16: Other information

Issue date	: 02/09/2022
Revision date	: 21/02/2025
Supersedes	: 21/02/2025

Full text of H-statements:	
H372	Causes damage to organs through prolonged or repeated exposure
H413	May cause long lasting harmful effects to aquatic life

Safety Data Sheet (SDS), South Africa (HCA)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.