

Revision: 1.1

Revision date:

16 April 2021

Date printed:

12 August 2023

Section 1. Identification

1.1 Product Identifier 2230

Product Name DICHLOROMETHANE HPLC

CAS Number 75-09-2

REACH Registration No 01-21194840404-41-XXXX

Molecular Formula $\text{CH}_2\text{Cl}_2 = 84.93$

1.2 Relevant identified uses of the substance or mixture & uses advised against

Uses of Material Chemical for industrial and laboratory use. Not suitable for domestic use.

1.3 Supplier Vickers Laboratories Ltd



Grangefield Industrial Estate
Richardshaw Road
Pudsey
West Yorkshire
LS28 6QW
UNITED KINGDOM

Phone 44 0113 2362811
Fax +44(0)113 2362703
Email safety@viclabs.co.uk
Website www.viclabs.co.uk

1.4 Emergency Telephone (08:00-16:30) +44(0) 113 2362811 (24hr) 112 (Have this document to hand)

Section 2. Hazards Identification

2.1 Classification of the substance or mixture

Classification according to regulation 1272/2008/EC

Skin corrosion/irritation, category 2
Serious eye damage/irritation, category 2
Carcinogenicity, category 2
Spec target organ tox - single, category 3

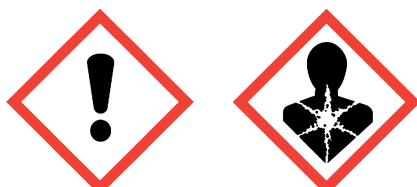
H315: Causes skin irritation.
H319: Causes serious eye irritation.
H351: Suspected of causing cancer.
H336: May cause drowsiness or dizziness.

2.2 Label elements

Labelling according to regulation 1272/2008/EC

Signal word Warning

Hazard Pictograms



Hazard Statements	Suspected of causing cancer. Causes skin irritation. Causes serious eye irritation. May cause drowsiness or dizziness.
Precautionary Statements	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. IF exposed or concerned: Get medical advice/attention. Store locked up. IF ON SKIN: Wash with plenty of soap and water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do and continue rinsing.

Section 3. Composition

3.1 Substances

Component	CAS No.	EEC No.	REACH No.	Conc w/w	CLP Classification (1272/2008/CE)
Dichloromethane	75-09-2	200-838-9	01-21194840404-41-XXXX	>99%	Skin Irrit. 2, Eye Irrit. 2, Carc. 2, STOT SE 3 (D)

Section 4. First Aid

4.1 Description of first aid measures

Eyes	Irrigate thoroughly with plenty of water for at least 10 minutes, holding the eye open. OBTAIN MEDICAL ATTENTION.
Skin	Thoroughly wash off skin with soap and water. Remove contaminated clothing immediately and wash before re-use.
Inhalation	Remove from exposure. Keep warm and at rest. If there is difficulty in breathing give oxygen if available. If breathing stops or shows signs of failing, apply artificial resuscitation. If unconscious place in the recovery position. OBTAIN MEDICAL ATTENTION URGENTLY.
Ingestion	If conscious give plenty of water to drink. Induce vomiting. If there is difficulty in breathing give oxygen if available. If breathing stops or shows signs of failing, apply artificial resuscitation. If unconscious place in the recovery position. OBTAIN MEDICAL ATTENTION URGENTLY.
Personal protection for first aiders	Wear protective gloves / eye protection.

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

Inhalation of vapours may cause headache, nausea or vomiting, dizziness, drowsiness

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

If symptoms of vapour inhalation occur OBTAIN IMMEDIATE MEDICAL ATTENTION.

Section 5. Fire Fighting

5.1 Extinguishing media

Extinguishing Media	Consider what other flammable materials are present and act accordingly. Use water spray to keep fire exposed containers cool.
Unsuitable Media	Do not use water jet.

5.2 Special hazards arising from the substance or mixture

Hazards	May evolve toxic fumes if involved in a fire. Vapour-air mixtures are explosive.
---------	--

5.3 Advice for firefighters

Advice for firefighters	Evacuate area immediately. Keep up wind. Avoid exposure to toxic vapours and fumes. Fire-fighters should wear protective clothing and breathing apparatus.
-------------------------	--

Section 6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal Protection	Avoid breathing vapour. Use approved personal protective equipment. Evacuate area immediately. Do not allow general use of area until it is safe to do so. Beware : vapour is heavier than air and will tend to accumulate at low spots.
---------------------	--

6.2 Environmental precautions

Environmental Keep material out of sewers, storm drains, surface waters and soil. Notify the Environmental Agency and local Environmental Health Officer if major spillage occurs.

6.3 Methods and material for containment and cleaning up

Major Spillage Contain and absorb on inert material. Transfer absorbent to salvage container for removal. Wash area down with detergent and copious amounts of water.

Minor Spillage Contain and absorb on inert material. Transfer absorbent to container for removal. Allow solvent to evaporate in remote area, then dispose of absorbent as solid chemical waste. Wash area down with detergent and copious amounts of water.

6.4 Reference to other sections

See section 8.2 for information on protective equipment and section 13 for information on disposal.

Section 7. Storage & Handling

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Do not breath vapours. Do not allow to contaminate clothing.

Ensure Local Exhaust Ventilation maintains vapour concentrations below the recommended limits.

7.2 Conditions for safe storage, including any incompatibilities

Well ventilated, cool, dry storage . Protect from direct sunlight. Protect against moisture to prevent decomposition and corrosion.

7.3 Specific end use(s)

See section 1.2.

Section 8. Workplace Exposure & Personal Protection

8.1 Control parameters

Component	CAS No	Concentration	Workplace Exposure Limits			
			Long Term (8hr TWA)	Short Term 15min period		
Dichloromethane	75-09-2	>99%	100.0 ppm	350.0 mg/m-3	200.0 ppm	706.0 mg/m-3

Exposure data source(s) IOELV: Indicative Occupational Exposure Limit Value.

8.2 Exposure controls

Respiratory Protection Use L.E.V. or natural ventilation to maintain vapour concentrations below exposure limits. If not, use a well maintained chemical cartridge organic vapour respirator, or use self contained breathing apparatus.

Hand Protection Use solvent resistant gloves.

Eye Protection Use tightly fitting chemical splash proof glasses or goggles.

Skin Protection Avoid contact with skin. If skin contact or contamination of clothing is likely, protective clothing must be worn.

Special Hazards No special precautions required.

Section 9. Physical & Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance Clear colourless liquid.

Odour Fresh and characteristic.

pH Not applicable

Boiling Point 39.8°C

Melting Point -96.7°C

Flash Point Not applicable

Upper Flammable Limit 22%

Lower Flammable Limit 13%

Auto Ignition 556°C

Explosive Properties Moderate/severe in confined spaces.

Oxidising Properties No.

Vapour Pressure 380mmHg @ 22°C

Relative Density	1.3250
Water Solubility	Insoluble in water.

9.2 Other information

No data available.

Section 10. Stability & Reactivity

10.1 Reactivity	No data available.
10.2 Chemical Stability	Stable under normal conditions
10.3 Possibility of hazardous reactions	No data available.
10.4 Conditions to Avoid	Hot surfaces and naked flames.
10.5 Incompatible Materials	Strong oxidising agents. Lithium, sodium, potassium and hot aluminium. Nitric acid.
10.6 Hazardous Decomposition Products	Toxic phosgene fumes.

Section 11. Toxicological Information

11.1 Information on toxicological effects

Eyes	Causes serious eye irritation.
Skin	Both the vapour and liquid are, irritating to the skin. Repeated exposure may cause dermatitis.
LD50 Skin	>2000mg/kg Rat
Ingestion	Low order of acute toxicity.
LD50 Oral	2136mg/kg Rat
Inhalation	Exposure to vapour concentrations above the occupational exposure limits may cause narcosis, with symptoms as for 'drunkenness'. High concentrations of vapour may cause breathing problems, leading to bronchitis, pulmonary oedema and eventually unconsciousness.
LD50 Inhalation	76,000mg/m ³ Rat (4 hours)
TCLo	5000ppm
Carcinogenicity	Suspected of causing cancer.
Mutagenicity	May be a mutagen.
Reproductive Effects	A greater risk of male sterility has been found in male workers. Increased rates of spontaneous abortions have been found in female workers.

Section 12. Ecological

12.1 Toxicity	Does not persist in the atmosphere. Slowly biodegradable in water and soil. Harmful to aquatic organisms.
LC50 Algal	>660mg/l Algae (96 hours)
LC50 Crustacea	Not available
LC50 Fish	193mg/l Fathead minnow (<i>Pimephales promelas</i>) (96 hours)
12.2 Persistence and degradability	No data available.
12.3 Bioaccumulative potential	No data available.
12.4 Mobility in soil	No data available.
12.5 Results of PBT & vPvB assessment	Assessment not required.
12.6 Other adverse effects	None known at present.

Section 13. Disposal Considerations

13.1 Waste treatment methods

Disposal Methods Dispose of in a licensed incinerator for organic solvents.
Contaminated Packaging Use a licensed waste disposer.

Section 14. Transport Information

14.1 UN Number 1593
14.2 Proper Shipping Name Dichloromethane
14.3 Transport classes
UN classification 6.1
Subsidiary hazard(s) None
Transport category 2
ADR Hazard ID 60
Tunnel Restriction Code E
14.4 Packing Group III
14.5 Environment hazards See section 12.
14.6 Special precautions for user No special precautions required.
14.7 Transport in bulk Not transported in bulk.



Section 15. Regulatory Information

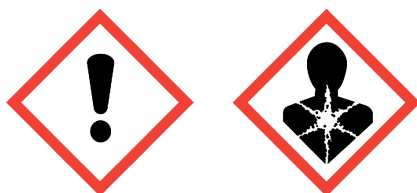
15.1 Safety, health and environment regulations specific for substance/mixture.

Classification, Labeling & Packaging of Substances & Mixtures Regulations (1272/2008/CE)

Classification Skin corrosion/irritation, category 2; Serious eye damage/irritation, category 2; Carcinogenicity, category 2; Spec target organ tox - single, category 3

Signal word Warning

Hazard Pictograms



Hazard Statements H351, H315, H319, H336
Suspected of causing cancer. Causes skin irritation. Causes serious eye irritation. May cause drowsiness or dizziness.

Precautionary Statements P201, P202, P308+P313, P405, P302+P352, P305+P351+P338
Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. IF exposed or concerned: Get medical advice/attention. Store locked up. IF ON SKIN: Wash with plenty of soap and water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do and continue rinsing.

15.2 Chemical safety assessment

Assessment not required.

Section 16. Other Information

The information contained in this document only covers the hazards presented by this material, it DOES NOT constitute a workplace risk assessment. See sections 11 for toxicological information and section 12 for ecological information.

Revision number: 1.1 (Supercedes revision 1.0)

Revision date: 16 April 2021

Reviewed by chemist: 16 April 2021

Printed date: 12 August 2023

