

MATERIAL SAFETY DATA SHEET (MSDS)



PRODUCT NAME: DICHLOROMETHANE

CAS No.: 75-09-2

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

1.1. Product identifier

Product form	: Substance
Product name	: DICHLOROMETHANE
Type of product	: Solvent
Product Grades (Applicable)	: D0003H(Pack size(s))-1LT, 2.5LT D0003A (Pack size(s) - 0.5LT, 2.5LT, 25LT
Product Code	: D0003
CAS No	: 75-09-2
Formula	: CH ₂ Cl ₂

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

1.2.1. Relevant identified uses	: Industrial For professional use only. Laboratory chemicals Manufacture of substances Solvents
1.2.2. Uses advised against	: No additional information available

1.3. Details of the supplier of the safety data sheet

RYZE CHEMIE
W-68,Mankivli MIDC
Badlapur (E), Thane,
Maharashtra-421503
www.ryzechemie.com

1.4. Emergency Telephone Number

+91- 99-3006-04-04 :

SECTION 2: Hazards Identification

2.1. Classification of the substance or mixture

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

Skin corrosion/irritation, Category 2 H315

Serious eye damage/eye irritation, Category 2	H319
Specific target organ toxicity – Single exposure, Category 3, Narcosis	H336
Irritation, Category 2	H351
Carcinogenicity, Category 2	
Narcosis	H337
Specific target organ toxicity — Single exposure, Category 3,	
Respiratory tract irritation	H337
Specific target organ toxicity — Repeated exposure, Category 2	



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

Adverse physicochemical, human health and environmental effects

Highly flammable liquid and vapour. Suspected of damaging fertility or the unborn child. May cause damage to organs through prolonged or repeated exposure. May cause drowsiness or dizziness. Causes skin irritation. May be fatal if swallowed and enters airways. Toxic to aquatic life with long lasting effects.

2.2. Label Elements

Labelling according to Regulation (EC) No. 1907/2006 [CLP]

Hazard pictograms (CLP)	:		
		GHS07	GHS08
Signal word (CLP)	:	Warning	
Hazard statements (CLP)	:	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 through prolonged or repeated exposure	
Precautionary statements (CLP)	:	P261 - Avoid breathing dust/fume/gas/mist/vapours/spray. P280 - Wear protective gloves, protective clothing, eye protection, face protection. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.	

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substance

Name : DICHLOROMETHANE
CAS-No. : 75-09-2
EC-No. : 200-838-9
EC Index-No : 602-004-00-3

Full text of R- and H-statements: see section 1

3.2. Mixture

Not applicable

SECTION 4: : First aid measures

4.1. Description of first aid measures

First-aid measures general : Call a physician immediately.
First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.
First-aid measures after skin contact : Wash with plenty of water/.... Wash contaminated clothing if irritation occurs: Get medical advice/attention.
First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention.
First-aid measures after ingestion : Immediately call a POISON CENTER/doctor. Do not induce vomiting. Call a physician immediately.

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

Symptoms/effects : Suspected of damaging fertility. May cause damage to organs. May cause drowsiness or dizziness.
Symptoms/effects after inhalation : May cause respiratory irritation. May cause drowsiness or dizziness.
Symptoms/effects after skin contact : Causes skin irritation. Irritation.
Symptoms/effects after ingestion : None under normal conditions.
Symptoms/effects after eye contact : May be fatal if swallowed and enters airways. Risk of lung oedema.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Carbon dioxide. Dry powder. Foam. Water spray.

Unsuitable extinguishing media : Do not use extinguishing media containing water

5.2. Special hazards arising from the substance or mixture

No additional information available

5.3. Advice for firefighters

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Remove ignition sources. Use special care to avoid static electric charges. No open flames. No smoking. 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

Emergency procedures : Ventilate spillage area. Evacuate unnecessary personnel. No open flames, no sparks, and no smoking. Do not breathe dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes.

6.1.2. For emergency responders

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

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

6.2. Environmental precautions

Avoid release to the environment. Toxic to aquatic life with long lasting effects.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material. Collect spillage. On land, sweep or shovel into suitable containers. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Notify authorities if product enters sewers or public waters.

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

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : Handle empty containers with care because residual vapours are flammable.

- Precautions for safe handling : No open flames. No smoking. Use only non-sparking tools. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use only outdoors or in a well-ventilated area. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Take precautionary measures against static discharge. Flammable vapours may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Do not breathe dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes.
- Hygiene measures : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

- Technical measures : Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment.
- Storage conditions : Keep in fireproof place. Keep container tightly closed. Store in a well-ventilated place. Keep cool. Store locked up.
- Packaging materials : Store always product in container of same material as original container

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

No additional information available

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

- Hand protection : Protective gloves
- Eye protection : Chemical goggles or safety glasses

Skin and body protection : Wear a mask
Respiratory protection : Wear appropriate mask

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Clear liquid.
Molecular mass	: 84.93 g/mol
Colour	: Colourless.
Odour	: chloroform-like odor
Odour threshold	: No data available
pH	: No data available
pH solution concentration	: No data available
Relative evaporation rate	: 0.71
Melting point	: -97 °C
Freezing point	: No data available
Boiling point	: 39.8 - 40 °C
Flash point	: No data availabl
Auto-ignition temperature	: 556 °C
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: 470.8 hPa at 20°
Relative vapour density at 20 °C	: Not available
Relative density	: Not available
Density	: 1.325 g/cm ³
Relative gas density	: No data available
Solubility	: Water: Slightly soluble
Partition coefficient n-octanol/water (Log Pow)	: 1,25
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

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical Stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

Direct sunlight. Overheating.

10.5. Incompatible materials

Oxidizing agent.

10.6. Hazardous decomposition products

No additional information available

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Causes skin irritation.
Skin corrosion/irritation	: Causes skin irritation. pH: ≈ 7
Serious eye damage/irritation	: Causes serious eye irritation
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Suspected of damaging fertility.
STOT-single exposure	: May cause drowsiness or dizziness.
STOT-repeated exposure	: May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard	: Not classified
Potential adverse human health effects and symptoms	: Not classified

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: Toxic to aquatic life with long lasting effects
Ecology - Water	Toxic to aquatic life with long lasting effects
Hazardous to the aquatic environment, short-term(acute)	: Not classified
Hazardous to the aquatic environment, long-term (chronic)	: Toxic to aquatic life with long lasting effects.

12.2. Persistence and degradability

n-HEXANE 99% AR (110-54-3)

Persistence and degradability	Rapidly degradable
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12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

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	:	Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation. Disposal must be done according to official regulations.
Additional information	:	Handle empty containers with care because residual vapours are flammable. Flammable vapours may accumulate in the container. Do not re-use empty containers.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

UN-No. (ADR)	:	UN 1593
UN-No. (IMDG)	:	UN 1593
UN-No.(IATA)	:	UN 1593
UN-No.(ADN)	:	UN 1593
UN-No. (RID)	:	UN 1593

14.2. UN proper shipping name

Proper Shipping Name (ADR)	:	DICHLOROMETHANE
Proper Shipping Name (IMDG)	:	DICHLOROMETHANE
Proper Shipping Name (IATA)	:	Dichloromethane
Proper Shipping Name (ADN)	:	DICHLOROMETHANE
Proper Shipping Name (RID)	:	DICHLOROMETHANE
Transport document description (ADR)	:	UN 1593 DICHLOROMETHANE, 6.1, III, (E)
Transport document description (IMDG)	:	UN 1593 DICHLOROMETHANE, 6.1, III
Transport document description (IATA)	:	UN 1593 Dichloromethane, 6.1, III
Transport document description (ADN)	:	UN 1593 DICHLOROMETHANE, 6.1, III
Transport document description (RID)	:	UN 1593 DICHLOROMETHANE, 6.1, III

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) : 6.1
 Danger labels (ADR) : 6.1



IMDG

Transport hazard class(es) (IMDG) : 6.1
 Danger labels (IMDG) : 6.1



IATA

Transport hazard class(es) (IATA) : 6.1
 Hazard labels (IATA) : 6.1



ADN

Transport hazard class(es) (ADN) : 6.1
 Hazard labels (ADN) : 6.1



RID

Transport hazard class(es) (RID) : 6.1
 Hazard labels (RID) : 6.1



14.4. Packing group

Packing group (ADR) : III
 Packing group (IMDG) : III
 Packing group (IATA) : III
 Packing group (ADN) : III
 Packing group (RID) : III

14.5. Environmental hazards

Dangerous for the environment : No
 Marine pollutant : No
 Other information : No supplementary information available

14.6. Special precautions for user

Overland transport :
 Classification code (ADR) : T1
 Limited quantities (ADR) : 5I
 Excepted quantities (ADR) : E1
 Packing instructions (ADR) : P001, IBC03, LP01, R001
 Special packing provisions (ADR) : B8
 Mixed packing provisions (ADR) : MP19
 Portable tank and bulk container instructions (ADR) : T7
 Portable tank and bulk container special provisions (ADR) : TP2
 Tank code (ADR) : L4BH
 Vehicle for tank carriage : AT

Transport category (ADR) : 2
 Special provisions for carriage - Bulk (ADR) : V12
 Special provisions for carriage - Loading, unloading and handling (ADR) : CV13, CV28
 Special provisions for carriage - Operation (ADR) : S9
 Hazard identification number (Kemler No.) : 60
 Orange plates :



Tunnel restriction code (ADR) : E
 EAC code : 2Z

- Transport by sea

Limited quantities (IMDG) : 1 L
 Excepted quantities (IMDG) : E2
 Packing instructions (IMDG) : P001, LP01
 IBC packing instructions (IMDG) : IBC03
 Tank instructions (IMDG) : T7
 Tank special provisions (IMDG) : TP2
 EmS-No. (Fire) : F-A
 EmS-No. (Spillage) : S-A
 Stowage category (IMDG) : A

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.

MFAG-No : 160

- Air transport

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

- Inland waterway transport

Classification code (ADN) : T1
 Limited quantities (ADN) : 5L
 Excepted quantities (ADN) : E1
 Equipment required (ADN) : PP, EP, TOX, A
 Special provisions (AND) : 516, 802
 Number of blue cones/lights (ADN) : 0

- Rail transport

Classification code (RID) : T1
 Limited quantities (RID) : 1L
 Excepted quantities (RID) : E2

Packing instructions (RID)	: P001, IBC02, R001
Mixed packing provisions (RID)	: MP19
Special provisions (RID)	: 516
Portable tank and bulk container instructions (RID)	: T7
Portable tank and bulk container special provisions (RID)	: TP2
Tank codes for RID tanks (RID)	: L4BH
Transport category (RID)	: 2
Colis express (express parcels) (RID)	: W12
Hazard identification number (RID)	: 60

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

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

No REACH Annex XVII restrictions

DICHLOROMETHANE is not on the REACH Candidate List

DICHLOROMETHANE is not on the REACH Annex XIV List

REACH Annex XIV (Authorisation List)

Not listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Not listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Not listed on the PIC list (Regulation EU 649/2012)

POP Regulation (Persistent Organic Pollutants)

Not listed on the POP list (Regulation EU 2019/1021)

Ozone Regulation (1005/2009)

Not listed on the Ozone Depletion list (Regulation EU 1005/2009)

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.1.2. National regulations

Germany

- Water hazard class (WGK) : WGK 2, Significantly hazardous to water (Classification according to AwSV; ID No. 124).
- Hazardous Incident Ordinance (12. BImSchV) : Is not subject of the Hazardous Incident Ordinance (12. BImSchV)

Netherlands

- SZW-lijst van kankerverwekkende stoffen : The substance is not listed
- SZW-lijst van mutagene stoffen : The substance is not listed
- SZW-lijst van reprotoxische stoffen – Borstvoeding : The substance is not listed
- SZW-lijst van reprotoxische stoffen – Vruchtbaarheid : DICHLOROMETHANE is listed
- SZW-lijst van reprotoxische stoffen – Ontwikkeling : The substance is not listed

France

Occupational diseases	
Code	Description
RG 59	Occupational poisoning by hexane

Denmark

- Classification remarks : Emergency management guidelines for the storage of flammable liquids must be followed
- Danish National Regulations : Young people below the age of 18 years are not allowed to use the product Pregnant/breastfeeding women working with the product must not be in direct contact with the product.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Abbreviations and acronyms:	
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration

Full text of H- and EUH-statements:	
Aquatic Chronic 2	Hazardous to the aquatic environment – Chronic Hazard, Category 2
Asp. Tox. 1	Aspiration hazard, Category 1
Flam. Liq. 2	Flammable liquids, Category 2
H225	Highly flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H336	May cause drowsiness or dizziness.
H361f	Suspected of damaging fertility.
H373	May cause damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.
Repr. 2	Reproductive toxicity, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT RE 2	Specific target organ toxicity – Repeated exposure, Category 2

Safety Data Sheet (SDS), EU

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.