SAFETY DATA SHEET

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

1.1 Product identifiers

Product name	Dichloromethane
CAS number	75-09-2
Synonyms	Methylene Chloride

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

Identified uses	Laboratory Chemicals

1.3 Details of the supplier of the safety data sheet

Company	Lab Alley, LLC 12501 Pauls Valley Road Austin, Texas 78737 U.S.A.
Telephone	512-668-9918
Fax	512-886-4008

1.4 Emergency telephone

Emergency Phone #	US & Canada: 1-800-535-5053	INFOTRAC
	International 1-352-323-3500	INFOTRAC

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Acute oral toxicity (Category 4)
Skin Corrosion/Irritation (Category 2)
Serious Eye Damage/Eye Irritation (Category 2A)
Specific target organ toxicity - single exposure, R (Category 3)
Specific target organ toxicity - single exposure, N (Category 3)
Carcinogenicity (Category 2)
Specific target organ toxicity - repeated exposure, N (Category 2)

2.2 GHS Label elements, including precautionary statements

Pictogram

Signal Word: Warning

Hazard statements:
Harmful if swallowed
Causes skin irritation
Causes serious eye irritation
May cause respiratory irritation
May cause dizziness ordrowsiness
Suspected of causing cancer
Causes damage to organs through prolonged or repeated exposure

Precautionary statements:
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Do not breathe dust/fume/gas/mist/vapours/spray.
Avoid breathing dust/fume/gas/mist/vapours/spray.
Wash hands thoroughly after handling.
Do not eat, drink or smoke when using this product.
Use only outdoors or in a well-ventilated area.
Wear protective gloves/protective clothing/eye protection/face protection.
Use personal protective equipment as required.
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
IF ON SKIN: Wash with soap and water.
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so - continue rinsing.
IF exposed or concerned: get medical advice/attention.
Call a POISON CENTER or a doctor/physician if you feel unwell.
Get medical advice/attention if you feel unwell.
Rinse mouth.
If skin irritation occurs: get medical advice/attention.
If eye irritation persists get medical advice/attention.
Take off contaminated clothing and wash before reuse.
Store in a well ventilated place. Keep container tightly closed.
Store locked up.
Dispose of contents/container to an approved waste disposal plant.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

None identified.

SECTION 3: Composition/information on ingredients

3.1 Components

Chemical name	Common name and synonyms	CAS number	Concentration
Dichloromethane	Methylene Chloride	75-09-2	≥ 99.5%

SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice

If inhaled	Remove victim to fresh air. Administer oxygen or artificial respiration if breathing is affected or stopped. Seek immediate medical attention if symptoms persist.
In case of skin contact	Wash exposed areas with water and mild soap. Remove contaminated clothing immediately and launder before reuse. If irritations persist, seek immediate medical attention.
In case of eye contact	Flush with water for 15 minutes. Seek immediate medical attention.
If swallowed	If swallowed. Seek immediate medical attention. Do not induce vomiting unless instructed to do so by medical personel or a poison control center.

4.2 Most important symptoms and effects, both acute and delayed

No information available.

4.3 Indication of any immediate medical attention and special treatment needed

Note to Physician: Treat Symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media	Water fog. Carbon dioxide (CO2). Dry chemical. Chemical foam.
Unsuitable extinguishing media	No information available.

5.2 Specific hazards arising from the substance or mixture

Product is flammable and may be ignited by heat, sparks, flames or other sources of ignition (e.g., static electricity, pilot lights or mechanical/electrical equipment). Vapors are heavier than air and may accumulate in low areas. Vapors may travel considerable distances to a source of ignition where they can ignite, flashback or explode. May create vapor/air explosion hazard indoors, outdoors or in sewers. If container is not properly cooled, it can explode in the heat of a fire.

5.3 Special protective equipment and precautions for firefighters

Use self-contained breathing apparatus and full bunker gear in fire areas. Evacuate all unprotected personnel from area. Keep containers cool with water fog to minimize swelling taking care not to spread flames with water used for cooling.

5.4 Further information

Flash Point 624 - 662 °C / 1155 - 1224 °F

Autoignition Temperature 556 °C / 1033 °F

Explosion limits

Upper 19%
Lower 12%

Sensitivity to Mechanical Impact No information available.

Sensitivity to Static Discharge No information available.

NFPA

Health	Flammability	Instability	Physical hazards
2	1	0	N/A

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Keep all sources of ignition and hot metal surfaces away from spill or release. Evacuate all unprotected personnel from the area.

6.2 Environmental precautions

Prevent liquid from entering drains, sewers, waterways, ground and surface water or soil. Contain spill if it can be done with minimal risk.

6.3 Methods and materials for containment and cleaning up

Use foam on spills to minimize vapors. Using only non-sparking tools and explosion proof equipment, collect spill on absorbent material and put into approved container.

6.4 Reference to other sections

See Section 2 for full list of hazard and precaution statements.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Vent container carefully before opening. Empty containers retain residue and/or vapor and may be dangerous. Do not cut, weld, braze solder, drill, grind or expose such containers to heat, flames, sparks, or other ignition sources. Keep containers tightly closed when not in use. Avoid prolonged breathing of mist or vapor. Wash thoroughly after handling.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Store out of direct sunlight and in a cool, well-ventilated area. Aluminum equipment should not be used in the sorage and/or transfer. Contact with aluminum parts in a pressurizable fluid system may cause violent reactions.

Incompatibilities

Strong oxidizers, alkalies, nitrogen peroxide, reactive metals, open flame, hot surfaces.

SECTION 8: Exposure controls/personal protection

8.1 Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Component	Type	Value
Dichloromethane	TWA	25 ppm
	STEL	125 ppm

US. ACGIH Threshold Limit Values

Component	Type	Value
Dichloromethane	TWA	50 ppm

US. NIOSH: Pocket Guide to Chemical Hazards

Component	Type	Value
Dichloromethane	IDLH	2300 ppm

Biological occupational exposure limits

No information available.

8.2 Exposure controls

Appropriate engineering controls

Adequate local or mechanical ventilation to reduce vapor or mist to below the PEL or TLV. Follow accepted work practices for handling a flammable material. Do not eat, drink or smoke in areas where this chemical is used or stored. Wash hands prior to eating, drinking or using the restroom. Any clothing or shoes which became contaminated with the product should be removed immeadiately and thoroughly laundered before wearing again.

Personal protective equipment

Eye/face protection

Goggles or approved OSHA device with side shields; do not wear contact lenses when handling this product.

Skin protection

Impervious solvent resistant gloves with a PF of 10 to 20. Impervious apron and work boots recommend where splashing may occur.

Body Protection
Wear appropriate clothing to prevent skin exposure.

Respiratory protection
Use the proper respirator with APFs ranging from 10 to 50 in areas where the chemical exposure is unknown or above the OSHA PEL (100ppm) or ACGIH TLV (10ppm [2006]).

Control of environmental exposure
Do not let product enter the drains.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical State	Liquid
Appearance	Colorless
Odor	Midly sweet
Odor Threshold	200-300 ppm
pH	No information available
Melting Point/Range	-95 °C / 139 °F
Boiling Point/Range	40 °C / 104 °F
Evaporation Rate	0.7 (Ether = 1)
Flammability (solid)	Not applicable.
Flammability or explosive limit	
Upper	19%
Lower	12%
Vapor Pressure	353.2 mmHg @ 20 °C
Vapor Density	2.93 @ 20 - 25 °C (68 - 77 °F) (Air = 1)
Density	1.325 g/ml @ 25 °C (77 °F)
Solubility	Slightly soluble
Partition coefficient; n-octanol/water	log Pow: 1.25
Autoignition Temp	556 °C / 1033 °F
Decomposition Temp	No information available.
Viscosity	0.41 mPa.s @ 25 °C (77 °F), dynamic
Molecular Formula	CH2Cl2
Molecular Weight	84.93 g/mol
VOC Content(%)	0% (VOC-Exempt Solvent)
Oxidizing properties	No information available.

9.2 Other safety information
No information available.

SECTION 10: Stability and reactivity

10.1 Reactivity

Reacts violently with active metals.

10.2 Chemical stability

Stable under normal conditions. Decomposes on exposure to light.

10.3 Possibility of hazardous reactions

Forms a detonable mixture with nitric acid.

10.4 Conditions to avoid

Excess heat. Protect from direct sunlight.

10.5 Incompatible materials

Strong oxidizers, alkalies, nitrogen peroxide, reactive metals, open flame, hot surfaces

10.6 Hazardous decomposition products

Hydrogen chloride, phosgene, chlorine, carbon oxides.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Product Information, Component Information

Acute toxicity

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Dichloromethane	>2000 mg/kg (Rat)	>2000 mg/kg (Rat)	52000 mg/m3 (Rat)

Skin corrosion/irritation

Contact may cause mild skin irritation including redness, burning and drying/cracking of the skin. Can be painful if skin is confined in gloves, clothing, etc. Repeated or prolonged contact with large amounts of this material may result in absorption through the skin to produce toxic effects.

Serious eye damage/eye irritation

Causes eye irritation including stinging, watering and redness which may result in corneal injury.

Respiratory or skin sensitization

Low to moderate degree of toxicity by inhalation. May cause respiratory tract irritation. Inhalation of vapors may cause drowsiness and dizziness.

Germ cell mutagenicity

No information available.

Carcinogenicity

Component	CAS	IARC	NTP	ACGIH	OSHA	Mexico
Dichloromethane	75-09-2	Group 2A	Reasonably Anticipated	A3	Listed	A3

Specific target organ toxicity - single exposure

Central Nervous System (CNS)

Specific target organ toxicity - repeated exposure

Liver, Kidney, Blood.

Reproductive toxicity

No information available.

Chronic effects

Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting: Causes central nervous system depression: Continued or high exposures by inhalation will cause anaesthetic effects. This may result in a loss of consciousness and could prove fatal: Causes formation of carbon monoxide in the blood. Carbon monoxide may cause adverse effects on the cardiovascular system and the central nervous system.

11.2 Additional Information

No information available.

SECTION 12: Ecological information

12.1 Toxicity

Product		Species	Test Results	
Methylene Chloride	EC50	freshwater algae	>660 mg/L	96h
	LC50	Pimephales promelas	193 mg/L	96h
	EC50	Microtox	1 mg/L	24h
	EC50	Microtox	2.88 mg/L	15 min
	EC50	Water Flea	140 mg/L	48h

12.2 Persistence and degradability

Persistence is unlikely based on information available.

12.3 Bio accumulative potential

No information available.

12.4 Mobility in soil

Will likely be mobile in the environment due to its volatility.

12.5 Results of PBT and vPvB assessment
No information available.

12.6 Endocrine disrupting properties
No information available.

12.7 Other adverse effects
No information available.

SECTION 13: Disposal considerations

13.1 Waste Disposal Methods
Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

SECTION 14: Transport information

DOT (US)

UN Number	UN 1593
Proper Shipping name	Dichloromethane
Hazard Class	6.1
Packaging Group	III

IMDG

UN Number	UN 1593
Proper Shipping name	Dichloromethane
Hazard Class	6.1
Packaging Group	III

IATA

UN Number	UN 1593
Proper Shipping name	Dichloromethane
Hazard Class	6.1
Packaging Group	III

SECTION 15: Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
Not applicable.

CERCLA Hazardous Substance List (40 CFR 302.4)
Listed. Dichloromethane 75-09-2. RQ: 1000 lb and 454 kg.

SARA 304 Emergency release notification
Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)
Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance
Not listed.

SARA 311/312 Hazardous
See Section 2 for more information.

SARA 313 (TRI reporting)
Listed. Dichloromethane 75-09-2. Weight: > 99.5%; Threshold values: 0.1%.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List
Listed. Dichloromethane 75-09-2.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)
Not regulated.

Safe Drinking Water Act
Listed. Dichloromethane 75-09-2.

FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace
Not listed.

US state regulations

US. Massachusetts RTK - Substance List
Listed. Dichloromethane 75-09-2.

US. New Jersey Worker and Community Right-to-Know Act
Listed. Dichloromethane 75-09-2.

US. Pennsylvania Worker and Community Right-to-Know Law
Listed. Dichloromethane 75-09-2.

California Proposition 65
This product contains a chemical known to the State of California to cause cancer. Dichloromethane 75-09-2.

SECTION 16: Other information

Date of Issue: 09/19/2024
Revised on 06/22/2026

SECTION 17: Disclaimer

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.