

# **SAFETY DATA SHEET**

Creation Date 27-Jan-2010 Revision Date 02-May-2025 Revision Number 12

## 1. Identification

Product Name Dichloromethane

Cat No. : AC167770000; AC167770025; AC167775000

CAS No 75-09-2

Synonyms Dichloromethane; DCM

Recommended Use Uses advised against Laboratory chemicals.

. This chemical/product is not and cannot be distributed in commerce (as defined in TSCA section 3(5)) or processed (as defined in TSCA section 3(13)) for consumer paint or coating removal.

After February 3, 2025, this chemical substance (as defined in TSCA section 3(2))/ product cannot be distributed in commerce to retailers. After January 28, 2026, this chemical substance (as defined in TSCA section 3(2))/product is and can only be distributed in commerce or processed with a concentration of methylene chloride equal to or greater than 0.1% by weight for the following purposes: (1) Processing as a reactant; (2) Processing for incorporation into a formulation, mixture, or reaction product; (3) Processing for repackaging; (4) Processing for recycling; (5) Industrial or commercial use as a laboratory chemical; (6) Industrial or commercial use as a bonding agent for solvent welding; (7) Industrial and commercial use as a paint and coating remover from safety critical, corrosion sensitive components of aircraft and spacecraft; (8) Industrial and commercial use as a processing aid; (9) Industrial and commercial use for plastic and rubber products manufacturing: (10) Industrial and commercial use as a solvent that becomes part of a formulation or mixture, where that formulation or mixture will be used inside a manufacturing process, and the solvent (methylene chloride) will be reclaimed; (11) Industrial and commercial use in the refinishing for wooden furniture, decorative pieces, and architectural fixtures of artistic, cultural or historic value until May 8, 2029; (12) Industrial and commercial use in adhesives and sealants in aircraft, space vehicle, and turbine applications for structural and safety critical non-structural applications until May 8, 2029; (13) Disposal; and (14) Export.

## Details of the supplier of the safety data sheet

## Company

Fisher Scientific Company One Reagent Lane Fair Lawn, NJ 07410 Tel: (201) 796-7100 Acros Organics One Reagent Lane Fair Lawn, NJ 07410

# **Emergency Telephone Number**

For information **US** call: 001-800-227-6701 / **Europe** call: +32 14 57 52 11 Emergency Number **US**:001-201-796-7100 / **Europe**: +32 14 57 52 99 **CHEMTREC** Tel. No. **US**:001-800-424-9300 / **Europe**:001-703-527-3887

Dichloromethane

# 2. Hazard(s) identification

## Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin Corrosion/IrritationCategory 2Serious Eye Damage/Eye IrritationCategory 2CarcinogenicityCategory 1BSpecific target organ toxicity (single exposure)Category 3

Target Organs - Central nervous system (CNS).
Specific target organ toxicity - (repeated exposure)

Target Organs - Liver, Kidney, Blood.

Category 2

#### Label Elements

## Signal Word

Danger

#### **Hazard Statements**

Causes skin irritation

Causes serious eye irritation

May cause drowsiness or dizziness

May cause cancer

May cause damage to organs through prolonged or repeated exposure



# **Precautionary Statements**

## Prevention

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Use personal protective equipment as required

Wash face, hands and any exposed skin thoroughly after handling

Wear eye/face protection

Do not breathe dust/fume/gas/mist/vapors/spray

Use only outdoors or in a well-ventilated area

# Response

IF exposed or concerned: Get medical attention/advice

#### Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

## Skin

IF ON SKIN: Wash with plenty of soap and water

If skin irritation occurs: Get medical advice/attention

Take off contaminated clothing and wash before reuse

#### **Eves**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing If eye irritation persists: Get medical advice/attention

# Storage

Store locked up

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

#### Dichloromethane

## Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

#### Other hazards

Contains a known or suspected endocrine disruptor. WARNING. Cancer - https://www.p65warnings.ca.gov/.

# 3. Composition/information on Ingredients

Component	CAS No	Weight %
Methylene chloride	75-09-2	>99.5

## 4. First-aid measures

**General Advice** If symptoms persist, call a physician.

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get

medical attention.

**Skin Contact** Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists,

call a physician.

**Inhalation** Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if

symptoms occur.

**Ingestion** Clean mouth with water and drink afterwards plenty of water.

Most important symptoms and

effects

Difficulty in breathing. 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

Treat symptomatically

Notes to Physician

# 5. Fire-fighting measures

Suitable Extinguishing Media Water spray, carbon dioxide (CO2), dry chemical, alcohol-resistant foam.

Unsuitable Extinguishing Media No information available

Flash Point No information available Method - No information available

**Autoignition Temperature** 556 °C / 1032.8 °F

**Explosion Limits** 

**Upper** 23 vol % **Lower** 13 vol %

Sensitivity to Mechanical Impact No information available Sensitivity to Static Discharge No information available

## Specific Hazards Arising from the Chemical

Thermal decomposition can lead to release of irritating gases and vapors. Keep product and empty container away from heat and sources of ignition.

#### **Dichloromethane**

#### **Hazardous Combustion Products**

Carbon monoxide (CO). Carbon dioxide (CO2). Phosgene. Hydrogen chloride gas.

## **Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA

HealthFlammabilityInstabilityPhysical hazards210N/A

# 6. Accidental release measures

Personal Precautions Use personal protective equipment as required. Ensure adequate ventilation. Avoid

breathing vapors or mists. Wear respiratory protection.

**Environmental Precautions** Should not be released into the environment.

**Methods for Containment and Clean** Prevent further leakage or spillage if safe to do so. Soak up with inert absorbent material. **Up**Keep in suitable, closed containers for disposal. Ventilate the area.

	7. Handling and Storage
Handling	Wear personal protective equipment/face protection. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation. Vapors are heavier than air and may spread along floors. Handle product only in closed system or provide appropriate exhaust ventilation. Reacts with aluminum and its alloys.
Storage.	Keep containers tightly closed in a dry, cool and well-ventilated place. Do not store in aluminum containers. Incompatible Materials. Strong oxidizing agents. Strong acids. Amines.

# 8. Exposure controls / personal protection

# **Exposure Guidelines**

Component	ACGIH TLV	OSHA PEL	NIOSH	Mexico OEL (TWA)
Methylene chloride	TWA: 50 ppm	(Vacated) TWA: 500 ppm	IDLH: 2300 ppm	TWA: 50 ppm
		(Vacated) STEL: 2000 ppm		
		(Vacated) Ceiling: 1000 ppm		
		TWA: 25 ppm		
		STEL: 125 ppm		

## Legend

ACGIH - American Conference of Governmental Industrial Hygienists

OSHA - Occupational Safety and Health Administration

NIOSH: NIOSH - National Institute for Occupational Safety and Health

are close to the workstation location. Ensure adequate ventilation, especially in confined

areas.

Personal Protective Equipment

**Eye/face Protection** Wear appropriate protective eyeglasses or chemical safety goggles as described by

OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard

EN166.

**Skin and body protection**Wear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory Protection In case of inadequate ventilation wear respiratory protection. When workers are facing

concentrations above the exposure limit they must use appropriate certified respirators.

**Recommended Filter type:** low boiling organic solvent. Type AX. Brown. conforming to EN371.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice.

# 9. Physical and chemical properties

Physical StateLiquidAppearanceColorlessOdorsweet

Odor Threshold No information available

pH Not applicable Insoluble in water

Melting Point/Range-97 °C / -142.6 °FBoiling Point/Range39 °C / 102.2 °FFlash PointNo information availableEvaporation RateNo information available

Flammability (solid,gas) Not applicable

Flammability or explosive limits

 Upper
 23 vol %

 Lower
 13 vol %

Vapor Pressure 350 mbar @ 20°C

Vapor Density2.93Specific Gravity1.33

SolubilityNo information availablePartition coefficient; n-octanol/waterNo data availableAutoignition Temperature556 °C / 1032.8 °FDecomposition TemperatureNo information availableViscosity0.42 mPas @ 25°C

Molecular FormulaC H2 Cl2Molecular Weight84.93

# 10. Stability and reactivity

Reactive Hazard None known, based on information available

**Stability** Stable under normal conditions. Decomposes on exposure to light.

**Conditions to Avoid** Excess heat. Protect from direct sunlight.

Incompatible Materials Strong oxidizing agents, Strong acids, Amines

Hazardous Decomposition Products Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>), Phosgene, Hydrogen chloride gas

Hazardous Polymerization Hazardous polymerization does not occur.

**Hazardous Reactions** Forms a detonable mixture with nitric acid.

# 11. Toxicological information

**Acute Toxicity** 

## **Product Information**

**Component Information** 

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Methylene chloride	> 2000 mg/kg (Rat)	> 2000 mg/kg ( Rat )	53 mg/L ( Rat ) 6 h
			76000 mg/m <sup>3</sup> ( Rat ) 4 h

Toxicologically Synergistic No information available

**Products** 

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation Irritating to eyes and skin

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Sensitization No information available

NTP: (National Toxicity Program)

Carcinogenicity

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	CAS No	IARC	NTP	ACGIH	OSHA	Mexico
Methylene chloride	75-09-2	Group 2A	Reasonably	A3	X	A3
		· '	Anticipated			

IARC (International Agency for Research on Cancer)

IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

Group 2A - Probably Carcinogenic to Humans Group 2B - Possibly Carcinogenic to Humans

NTP: (National Toxicity Program) Known - Known Carcinogen

Reasonably Anticipated - Reasonably Anticipated to be a Human

Carcinogen

ACGIH: (American Conference of Governmental Industrial A1 - Known Human Carcinogen

Hygienists)

A2 - Suspected Human Carcinogen

A3 - Animal Carcinogen

ACGIH: (American Conference of Governmental Industrial Hygienists)

Mexico - Occupational Exposure Limits - Carcinogens

A1 - Confirmed Human Carcinogen A2 - Suspected Human Carcinogen A3 - Confirmed Animal Carcinogen

A4 - Not Classifiable as a Human Carcinogen A5 - Not Suspected as a Human Carcinogen

No information available **Mutagenic Effects** 

Mexico - Occupational Exposure Limits - Carcinogens

No information available. **Reproductive Effects** 

**Developmental Effects** No information available.

No information available. **Teratogenicity** 

STOT - single exposure Central nervous system (CNS)

STOT - repeated exposure Liver Kidney Blood

**Aspiration hazard** No information available

delayed

Symptoms / effects, both acute and 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

**Endocrine Disruptor Information** No information available

Other Adverse Effects Tumorigenic effects have been reported in experimental animals.

# 12. Ecological information

**Ecotoxicity** 

	Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Γ	Methylene chloride	EC50:>660 mg/L/96h	Pimephales promelas:	EC50: 1 mg/L/24 h	EC50: 140 mg/L/48h
	-		LC50:193 mg/L/96h	EC50: 2.88 mg/L/15 min	_

Persistence and Degradability Persistence is unlikely based on information available.

**Bioaccumulation/ Accumulation** No information available.

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

#### Dichloromethane

Component	log Pow
Methylene chloride	1.25

# 13. Disposal considerations

#### **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.

Component	RCRA - U Series Wastes	RCRA - P Series Wastes
Methylene chloride - 75-09-2	U080	-

# 14. Transport information

DOT

**UN-No** UN1593

Proper Shipping Name DICHLOROMETHANE

Hazard Class 6.1
Packing Group

TDG

**UN-No** UN1593

Proper Shipping Name DICHLOROMETHANE

Hazard Class 6.1 Packing Group

<u>IATA</u>

**UN-No** UN1593

Proper Shipping Name Dichloromethane

Hazard Class 6.1
Packing Group

IMDG/IMO

**UN-No** UN1593

Proper Shipping Name Dichloromethane

Hazard Class 6.1 Packing Group

# 15. Regulatory Information

## **United States of America Inventory**

Component	CAS No	TSCA	TSCA Inventory notification - Active-Inactive	TSCA - EPA Regulatory Flags
Methylene chloride	75-09-2	X	ACTIVE	R

#### Legend:

TSCA US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

X - Listed

'-' - Not Listed

R - Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.

#### Section 6(a) of the Toxic Substances Control Act (TSCA)

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After February 3, 2025, this chemical substance (as defined in TSCA section 3(2))/ product cannot be distributed in commerce to retailers. After January 28, 2026, this chemical substance (as defined in TSCA section 3(2))/product is and can only be distributed in commerce or processed with a concentration of methylene chloride equal to or greater than 0.1% by weight for the following purposes: (1) Processing as a reactant; (2) Processing for incorporation into a formulation, mixture, or reaction product; (3) Processing for repackaging; (4) Processing for recycling; (5) Industrial or commercial use as a laboratory chemical; (6) Industrial or commercial use as a bonding agent for solvent welding; (7) Industrial and commercial use as a paint and coating remover from safety critical, corrosion sensitive components of aircraft and spacecraft; (8) Industrial and commercial use as a processing aid; (9) Industrial and commercial use for plastic and rubber products manufacturing; (10) Industrial and commercial use as a solvent that becomes part of a formulation or mixture, where that formulation or mixture will be used inside a manufacturing process, and the solvent (methylene chloride) will be reclaimed; (11) Industrial and commercial use in the refinishing for wooden furniture, decorative

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pieces, and architectural fixtures of artistic, cultural or historic value until May 8, 2029; (12) Industrial and commercial use in adhesives and sealants in aircraft, space vehicle, and turbine applications for structural and safety critical non-structural applications until May 8, 2029; (13) Disposal; and (14) Export.

# TSCA - Per 40 CFR 751, Regulation of Certain Chemical Substances & Mixtures, Under TSCA Section 6(h) (PBT)

Not applicable

## TSCA 12(b) - Notices of Export

Not applicable

Component	CAS No	TSCA 12(b) - Notices of Export		
Methylene chloride	75-09-2	Section 6		

#### International Inventories

Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), China (IECSC), Korea (KECL).

Component	CAS No	DSL	NDSL	EINECS	PICCS	ENCS	ISHL	AICS	IECSC	KECL
Methylene chloride	75-09-2	X	-	200-838-9	X	X	X	X	X	KE-23893

KECL - NIER number or KE number (http://ncis.nier.go.kr/en/main.do)

## U.S. Federal Regulations

#### **SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Component	CAS No	Weight %	SARA 313 - Threshold Values %	SARA 313 - Reporting threasholds
Methylene chloride	75-09-2	>99.5	0.1 %	-

#### SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

**CWA (Clean Water Act)** 

Component	Component CWA - Hazardous Substances		CWA - Toxic Pollutants	CWA - Priority Pollutants
Methylene chloride	-	-	X	X

#### Clean Air Act

Component	HAPS Data	Class 1 Ozone Depletors	Class 2 Ozone Depletors
Methylene chloride	X		-

# **OSHA** - Occupational Safety and

Health Administration

Component	Specifically Regulated Chemicals	Highly Hazardous Chemicals
Methylene chloride	125 ppm STEL	-
	12.5 ppm Action Level	
	25 ppm TWA	

#### **CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355).

Component	Hazardous Substances RQs	CERCLA Extremely Hazardous Substances RQs	SARA Reportable Quantity (RQ)
Methylene chloride	1000 lb	-	1000 lb

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	454 kg

## **California Proposition 65**

This product contains the following Proposition 65 chemicals.

Component	CAS No	California Prop. 65	Prop 65 NSRL	Category
Methylene chloride	75-09-2	Carcinogen	200 μg/day	Carcinogen
			50 μg/day	

# U.S. State Right-to-Know Regulations

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Methylene chloride	X	X	X	X	Х

**U.S. Department of Transportation** 

Reportable Quantity (RQ): Y
DOT Marine Pollutant N
DOT Severe Marine Pollutant N

U.S. Department of Homeland

Security

This product does not contain any DHS chemicals.

Other International Regulations

Mexico - Grade No information available

## Authorisation/Restrictions according to EU REACH

Component	CAS No	REACH (1907/2006) - Annex XIV - Substances Subject to Authorization		REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC)
Methylene chloride	75-09-2	-	Use restricted. See entry 59. (see link for restriction details) Use restricted. See entry 75. (see link for restriction details)	-

Restricted to industrial use and to approved professionals.

## **REACH links**

https://echa.europa.eu/substances-restricted-under-reach

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

Component	CAS No	OECD HPV	Persistent Organic Pollutant	Ozone Depletion Potential	Restriction of Hazardous Substances (RoHS)
Methylene chloride	75-09-2	Listed	Not applicable	Not applicable	Not applicable

Contains component(s) that meet a 'definition' of per & poly fluoroalkyl substance (PFAS)? Not applicable

# Other International Regulations

#### **Dichloromethane**

Component	CAS No	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements	Rotterdam Convention (PIC)	Basel Convention (Hazardous Waste)
Methylene chloride	75-09-2	Not applicable	Not applicable	Not applicable	Annex I - Y45

# 16. Other Information

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Revision Summary This document has been updated to comply with the US OSHA HazCom 2012 Standard

replacing the current legislation under 29 CFR 1910.1200 to align with the Globally

Harmonized System of Classification and Labeling of Chemicals (GHS).

## **Disclaimer**

The information provided in 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text

**End of SDS**