

SAFETY DATA SHEET

Creation Date 29-Jan-2010 Revision Date 28-Nov-2019 Revision Number 6

1. Identification

Product Name Dichloromethane, stabilized with ethanol

Cat No.: AC124050000; AC124050010; AC124050025; AC124050050;

AC124050100; AC124050250

CAS-No 75-09-2

Synonyms Methylene chloride

Recommended Use Laboratory chemicals.

Uses advised against Food, drug, pesticide or biocidal product use. 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.

Details of the supplier of the safety data sheet

Company

Fisher Scientific Acros Organics
One Reagent Lane One Reagent Lane
Fair Lawn, NJ 07410 Fair Lawn, NJ 07410

Tel: (201) 796-7100

Emergency Telephone Number

For information **US** call: 001-800-ACROS-01 / **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

2. Hazard(s) identification

Classification

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

Skin Corrosion/Irritation Category 2
Serious Eye Damage/Eye Irritation Category 2
Carcinogenicity Category 2
Specific target organ toxicity (single exposure) Category 3

Target Organs - Central nervous system (CNS).

Label Elements

Signal Word

Warning

Hazard Statements

Causes skin irritation
Causes serious eye irritation
May cause drowsiness or dizziness
May cause cancer



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

Eyes

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

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

WARNING. Cancer - https://www.p65warnings.ca.gov/.

3. Composition/Information on Ingredients

Component	CAS-No	Weight %
Methylene chloride	75-09-2	> 99.5
Ethyl alcohol	64-17-5	0.2

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. Get medical attention.

Inhalation Remove to fresh air. If breathing is difficult, give oxygen. Get medical attention.

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

Most important symptoms and

effects

Notes to Physician

Difficulty in breathing. Inhalation of high vapor concentrations may cause symptoms like

headache, dizziness, tiredness, nausea and vomiting

Treat symptomatically

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 / 1033 °F

Explosion Limits

Upper 22 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.

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

Health	Flammability	Instability	Physical hazards
2	1	0	N/A

6. Accidental release measures

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

Environmental Precautions Should not be released into the environment. See Section 12 for additional Ecological

Information.

Methods for Containment and Clean Soak up with inert absorbent material. Keep in suitable, closed containers for disposal. **Up**

7. Handling	and	storage
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Handling Wear personal protective equipment/face protection. Ensure adequate ventilation. Do not

get in eyes, on skin, or on clothing. Avoid ingestion and inhalation.

Storage Keep containers tightly closed in a dry, cool and well-ventilated place.

8. Exposure controls / personal protection

Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH	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		
Ethyl alcohol	STEL: 1000 ppm	(Vacated) TWA: 1000 ppm	IDLH: 3300 ppm	STEL: 1000 ppm
		(Vacated) TWA: 1900 mg/m ³	TWA: 1000 ppm	
		TWA: 1000 ppm	TWA: 1900 mg/m ³	
		TWA: 1900 mg/m ³	_	

Legend

ACGIH - American Conference of Governmental Industrial Hygienists

OSHA - Occupational Safety and Health Administration

NIOSH IDLH: NIOSH - National Institute for Occupational Safety and Health

Engineering Measures Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations

and safety showers are close to the workstation location.

Personal Protective Equipment

Eye/face Protection Tight sealing safety goggles. Face protection shield.

Skin and body protectionWear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory Protection Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard

EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

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
Melting Point/Range -97 °C / -142.6 °F

Boiling Point/Range 39 - 40 °C / 102.2 - 104 °F @ 760 mmHg

Flash Point No information available Evaporation Rate No information available

Flammability (solid,gas) Not applicable

Flammability or explosive limits

 Upper
 22 vol %

 Lower
 13 vol %

Vapor Pressure350 mbar @ 20 °CVapor DensityNo information available

Specific Gravity 1.325

Solubility
Soluble in water
Partition coefficient; n-octanol/water
Autoignition Temperature
Soluble in water
No data available
556 °C / 1033 °F

Decomposition Temperature > 120°C

Viscosity 0.43 mPa.s @ 20 °C

Molecular FormulaC H2 Cl2Molecular Weight84.93

10. Stability and reactivity

Reactive Hazard None known, based on information available

Stability Stable under recommended storage conditions.

Conditions to Avoid Incompatible products. Excess heat.

Strong oxidizing agents, Strong acids, Amines, Aluminium, **Incompatible Materials**

Hazardous Decomposition Products Carbon monoxide (CO), Carbon dioxide (CO2), Phosgene, Hydrogen chloride gas

Hazardous polymerization does not occur. **Hazardous Polymerization**

Hazardous Reactions None under normal processing.

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/m³ (Rat) 4 h
Ethyl alcohol	LD50 = 10470 mg/kg	Not listed	LC50 = 117-125 mg/l (4h)
	OCED 401 (Rat)		OECD 403 (rat)
	3450 mg/kg (Mouse)		20000 ppm/10H (rat)

Toxicologically Synergistic

Products

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

Irritation Irritating to eyes, respiratory system and skin

Sensitization No information available

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	Х	A3
			Anticipated			
Ethyl alcohol	64-17-5	Group 1	Known	A3	X	A3

IARC (International Agency for Research on Cancer) IARC (International Agency for Research on Cancer)

No information available

Group 1 - Carcinogenic to Humans

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

NTP: (National Toxicity Program) NTP: (National Toxicity Program)

Known - Known Carcinogen

Reasonably Anticipated - Reasonably Anticipated to be a Human

Carcinogen

ACGIH: (American Conference of Governmental Industrial

Mexico - Occupational Exposure Limits - Carcinogens

Hygienists)

A1 - Known Human Carcinogen

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**

Reproductive Effects No information available.

Developmental Effects Component substance is listed on California Proposition 65 as a developmental hazard.

Dichloromethane, stabilized with ethanol

Teratogenicity No information available.

STOT - single exposure Central nervous system (CNS)

STOT - repeated exposure None known

Aspiration hazard No information available

Symptoms / effects,both acute and delayed

Symptoms / effects,both acute and Inhalation of high vapor concentrations may cause symptoms like headache, dizziness,

tiredness, nausea and vomiting

Endocrine Disruptor Information No information available

Other Adverse Effects The toxicological properties have not been fully investigated.

12. Ecological information

Ecotoxicity

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	Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Ī	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	_
Ī	Ethyl alcohol	EC50 (72h) = 275 mg/l	Fathead minnow	Photobacterium	EC50 = 9268 mg/L/48h
	-	(Chlorella vulgaris)	(Pimephales promelas)	phosphoreum:EC50 = 34634	EC50 = 10800 mg/L/24h
			LC50 = 14200 mg/l/96h	mg/L/30 min	
			_	Photobacterium	
-				phosphoreum:EC50 = 35470	
-				mg/L/5 min	

Persistence and Degradability Persistence is unlikely based on information available.

Bioaccumulation/ Accumulation No information available.

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

Component	log Pow
Methylene chloride	1.25
Ethyl alcohol	-0.32

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 III

TDG

UN-No UN1593

Proper Shipping Name DICHLOROMETHANE

Hazard Class 6.1
Packing Group

<u>IATA</u>

UN-No UN1593

Proper Shipping Name DICHLOROMETHANE

Dichloromethane, stabilized with ethanol

Hazard Class 6.1 Packing Group III

IMDG/IMO

UN-No UN1593

Proper Shipping Name DICHLOROMETHANE
Hazard Class 6 1

Hazard Class 6.1 Packing Group III

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
Ethyl alcohol	64-17-5	Χ	ACTIVE	-

Legend:

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) 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.

TSCA 12(b) - Notices of Export Not applicable

International Inventories

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

Component	CAS-No	DSL	NDSL	EINECS	PICCS	ENCS	AICS	IECSC	KECL
Methylene chloride	75-09-2	Х	-	200-838-9	X	X	Х	Х	KE-23893
Ethyl alcohol	64-17-5	Х	-	200-578-6	Х	X	Х	Х	KE-13217

U.S. Federal Regulations

SARA 313

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

SARA 311/312 Hazard Categories See section 2 for more information

CWA (Clean Water Act)

Component	CWA - Hazardous Substances	CWA - Reportable Quantities	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)

Component	Hazardous Substances RQs	CERCLA EHS RQs
Methylene chloride	1000 lb 1 lb	-

California Proposition 65

This product contains the following Proposition 65 chemicals. Ethyl alcohol is only a considered a Proposition 65 developmental hazard when it is ingested as an alcoholic beverage.

Component	CAS-No	California Prop. 65	Prop 65 NSRL	Category
Methylene chloride	75-09-2	Carcinogen	200 μg/day 50 μg/day	Carcinogen
Ethyl alcohol	64-17-5	Development (alcoholic beverages only) Carcinogen	-	Developmental Carcinogen

U.S. State Right-to-Know

Regulations

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

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

16. Other information

Prepared By Regulatory Affairs

Thermo Fisher Scientific

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 29-Jan-2010

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 28-Nov-2019

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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