Material Safety Data Sheet
Dichloromethane

ACC# 14930

Section 1 - Chemical Product and Company Identification

MSDS Name: Dichloromethane
Catalog Numbers: S71971, S71971-1, S80084, S80084-1, S80084-2SPEC, S80084HPLC, S80084SPEC, 01424LOT013, 01424LOT014, 0142RS50, 0143RS115, 0143RS200, 0143RS28, 0143RS50, BP1186 4, BP1186-4, BP11864, BP11864 001, BP11864001, BP1186RS115, BP1186RS200, BP1186RS28, BP1186RS50, BP1186S 115, BP1186SS 200, BP1186SS 30, BP1186SS 50, BP1186SS115, BP1186SS200, BP1186SS28, BP1186SS30, BP1186SS50, BPD143RS-115, BPD143RS-200, BPD143RS-28, BPD143RS-50, BW4250RT50, D123-1, D142 4, D142-4, D1424, D1424LOT011, D1424LOT012, D142SS115, D142SS200, D142SS28, D142SS50, D 1, D143 4, D143-1, D143-4, D1431, D1434, D1434LC, D1434LOT002, D143SK 1, D143SK 4, D143SK-1, D143SK-4, D143SK1, D143SK4, D143SK4001, D143SS-11, D143SS-115, D143SS-20, D143SS-200, D143SS-30, D143SS-50, D143SS115, D143SS28, D143SS50, D150 1, D150 4, D150-1, D150-4, D1501, D1504, D150J4, D150SK 1, D150SK 4, D150SK-1, D150SK-4, D150SK1, D150SK4, D150SS 200, D150SS 30, D150SS 50, D150SS-11, D150SS-115, D150SS-20, D150SS-200, D150SS-30, D150SS-50, D150SS200, D150SS30, D150SS50, D151 1, D151 4, D151-1, D151-4, D1511, D1514, D1514002, D1514003, D1514004, D1514LC, D1514LOT029, D1514LOT030, D1514LOT038, D1514LOT039, D1514LOT040, D1514LOT043, D1514LOT044, D1514LOT046, D1514LOT047, D1514LOT049, D1514LOT052, D1514LOT053, D1514LOT054, D1514LOT062, D151RS200, D151R D151SS115, D151SS200, D151SS28, D151SS50, D152-4, D154 4, D1544, D1544LOT009, D1544LOT031, D1544LOT038, D1544LOT039, D35 1, D35 4, D35- D35-4, D351, D354, D37 1, D37 20, D37 200, D37 200 001, D37 200 002, D37 4, 500, D37-1, D37-20, D37-200, D37-4, D37-500, D371, D3720, D37200, D37200 0 D37200 002, D37200001, D37200002, D37200004, D374, D37500, D37FB115, D37FB19, D37FB200, D37FB50, D37RB115, D37RB19, D37RB200, D37RB50, D37RS115, D37RS200, D37RS28, D37RS50, D37SK 4, D37SK-4, D37SK4, D37SS D37SS-115, D37SS-200, D37SS-30, D37SS-50, D37SS115, D37SS200, D37SS28,

D37SS50, FLBP1186RS-115, FLBP1186RS-200, FLBP1186RS-28, FLBP1186RS-50, FLD142RS-115, FLD142RS-200, FLD142RS-28, FLD142RS-50, NC9552254, O142RS115, O142RS200, O142RS28, O142RS50, S80084-1MF*, S800842SPEC, S80084MF*

Synonyms: Methylene chloride, methylene dichloride, freon30

Company Identification:

Fisher Scientific
1 Reagent Lane
Fairlawn, NJ 07410

For information, call: 201-796-7100
Emergency Number: 201-796-7100
For CHEMTREC assistance, call: 800-424-9300
For International CHEMTREC assistance, call: 703-527-3887

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELI
75-09-2	Methylene chloride	100	200-838-

Hazard Symbols: XN
Risk Phrases: 40

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: colourless. **Caution!** May cause respiratory tract irritation.May cause digestive tract irritation. May be harmful if swallowed.May cause central nervous system depression. May be absorbed throughthe skin. May cause fetal effects based upon anim studies. Maycause reproductive effects based upon animal studies. causesevere eye and skin irritation with possible burns. May cause cancerbased on animal studies. May be harmful if inhaled.
Target Organs: Blood, central nervous system.

Potential Health Effects

Eye: Contact with eyes may cause severe irritation, and possible eye burns.
Skin: May be absorbed through the skin. Causes irritation with burning pain, itchi and redness. Prolonged exposure may result in skin burns.
Ingestion: May cause irritation of the digestive tract. May cause central nervous system depression, characterized by excitement, followed by headache, dizziness, drowsiness, and nausea. Advanced stages may cause collapse, unconsciousness, c and possible death due to respiratory failure.
Inhalation: Inhalation of high concentrations may cause central nervous system effects characterized by headache, dizziness, unconsciousness and coma. Causes respiratory tract irritation. May cause blood changes. Overexposure may cause an increase in carboxyhemoglobin levels in the blood.
Chronic: Possible cancer hazard based on tests with laboratory animals. Prolonge repeated skin contact may cause dermatitis. May cause fetal effects.

Section 4 - First Aid Measures

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasio lifting the upper and lower lids. Get medical aid immediately.
Skin: Get medical aid. Immediately flush skin with plenty of soap and water for at 15 minutes while removing contaminated clothing and shoes.
Ingestion: If victim is conscious and alert, give 2-4 cupfuls of milk or water. Neve give anything by mouth to an unconscious person. Get medical aid immediately.
Inhalation: Get medical aid immediately. Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, giv oxygen.
Notes to Physician: Treat symptomatically and supportively.

Section 5 - Firefighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus i pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear Vapors mixed with air in proper proportion will propagate a flame. Will form explo mixtures in atmospheres having high oxygen contents.
Extinguishing Media: In case of fire, use water, dry chemical, chemical foam, or alcohol-resistant foam. Use water spray to cool fire-exposed containers.
Autoignition Temperature: 1033 deg F (556.11 deg C)
Flash Point: Not applicable.(estimated) Health: ; Flammability: ; Reactivity: Expl Limits, Lower: 15.1 @ 103xC Upper: 17.3 @ 148xC

Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.
Spills/Leaks: Absorb spill with inert material, (e.g., dry sand or earth), then plac into a chemical waste container.

Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Use with adequate ventilation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestio inhalation.
Storage: Store in a tightly closed container. Keep from contact with oxidizing materials. Store in a cool, dry, well-ventilated area away from incompatible substances.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls: Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final P
Methylene chloride	50 ppm ; 174 mg/m3	NIOSH Potential Occupational Carcinogen - see Appendix A Potential NIOSH carcinogen.	25 ppm TWA; ppm STEL (15 TWA); 25 ppm (8 hr.); 125 pp

OSHA Vacated PELs: Methylene chloride: 500 ppm TWA
Personal Protective Equipment
Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as descri by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.
Skin: Wear appropriate protective gloves to prevent skin exposure.
Clothing: Wear appropriate protective clothing to prevent skin exposure.
Respirators: Follow the OSHA respirator regulations found in 29CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

Section 9 - Physical and Chemical Properties

Physical State: Liquid
Appearance: colourless
Odor: ethereal odor
pH: Not available.
Vapor Pressure: 350 mm Hg @ 20
Vapor Density: 2.9 (Air=1)
Evaporation Rate:
Viscosity: Not available.
Boiling Point: 104 deg F
Freezing/Melting Point:-142 deg F
Decomposition Temperature: Not available.
Solubility: Moderately soluble in water
Specific Gravity/Density:1.33 (Water=1)
Molecular Formula:CH2Cl2
Molecular Weight:

Section 10 - Stability and Reactivity

Chemical Stability: Stable.
Conditions to Avoid: Incompatible materials, strong oxidants.
Incompatibilities with Other Materials: Incompatible with strong oxidizers. Ca react dangerously with nitrogen tetroxide, liquid oxygen, potassium, sodium, sodium-potassium alloys, lithium, potassium hydroxide with N-methyl-N-nitroso ur potassium t-butoxide, and finely powdered aluminum and magnesium. occurred wi with mixtures of this materials and liquid ammonia or dimethylaminopropylamine. form explosive mixtures in atmospheres having high oxygen content.
Hazardous Decomposition Products: Hydrogen chloride, phosgene, carbon monoxide, carbon dioxide.
Hazardous Polymerization: Has not been reported.

Section 11 - Toxicological Information

RTECS#:
CAS# 75-09-2: PA8050000
LD50/LC50:
CAS# 75-09-2:
Inhalation, mouse: LC50 =14400 ppm/7H;
Inhalation, rat: LC50 =88 gm/m3/30M;
Oral, rat: LD50 = 1600 mg/kg;
Carcinogenicity:
CAS# 75-09-2:
ACGIH: A3 - Animal Carcinogen
California: carcinogen - initial date 4/1/88
NIOSH: occupational carcinogen
NTP: Suspect carcinogen
OSHA: Possible Select carcinogen
IARC: Group 2B carcinogen
Epidemiology: No data available.
Teratogenicity: No data available.
Reproductive Effects: No data available.
Neurotoxicity: No data available.
Mutagenicity: No data available.
Other Studies: No data available.

Section 12 - Ecological Information

Ecotoxicity: This chemical has a moderate potential to affect some aquatic organi It is resistant to biodegradation, and has a low potential to persist in the aquatic environment. 96-hr. EC50 (loss of equilibrium); Fathead minnow: 99mg/L; 96-hr. EC10: 66.3 mg/L. Bluegill sunfish: 96-hr. LC50=220 mg/L; Water flea: 24-hr. LC50=2270 mg/L; No observed effect level:1550 mg/L.
Environmental Fate: This material is not likely to bioconcentrate.
Physical/Chemical: Not available.
Other: Not available.

Section 13 - Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.
RCRA D-Series Maximum Concentration ofContaminants: None listed.
RCRA D-Series Chronic Toxicity ReferenceLevels: None listed.
RCRA F-Series: None listed.
RCRA P-Series: None listed.
RCRA U-Series: CAS# 75-09-2: waste numberU080.

Section 14 - Transport Information

	US DOT	IATA	RID/ADR	IMO
Shipping Name:	DICHLOROMETHANE	No information available.	No information available.	No information available.METHYLEN CHLORIDE
Hazard Class:	6.1			6.1
UN Number:	UN1593			UN1593
Packing Group:	III			III

Section 15 - Regulatory Information

US FEDERAL

TSCA
CAS# 75-09-2 is listed on the TSCA inventory.
Health & Safety Reporting List
CAS# 75-09-2: Effective Date: October 4, 1982; Sunset Date: October 4, 1992
Chemical Test Rules
None of the chemicals in this product are under a Chemical Test Rule.
Section 12b
None of the chemicals are listed under TSCA Section 12b.
TSCA Significant New Use Rule
None of the chemicals in this material have a SNUR under TSCA.
SARA

Section 302 (RQ)
CAS# 75-09-2: final RQ = 1000 pounds (454 kg)
Section 302 (TPQ)
None of the chemicals in this product have a TPQ.
SARA Codes
CAS # 75-09-2: acute, chronic.
Section 313
This material contains Methylene chloride (CAS# 75-09-2, 100%),which is subject the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.
Clean Air Act:
CAS# 75-09-2 is listed as a hazardous air pollutant (HAP). This material does not contain any Class 1 Ozone depletors. This material does not contain any Class 2 Oz depletors.
Clean Water Act:
None of the chemicals in this product are listed as Hazardous Substances under th CWA. CAS# 75-09-2 is listed as a Priority Pollutant under the Clean Water Act. No the chemicals in this product are listed as Toxic Pollutants under the CWA.
OSHA:
None of the chemicals in this product are considered highly hazardous by OSHA.
STATE
CAS# 75-09-2 can be found on the following state right to know lists: California, N Jersey, Florida, Pennsylvania, Minnesota, Massachusetts.
The following statement(s) is(are) made in order to comply with the Califo Safe Drinking Water Act: WARNING: This product contains Methylene chloride, chemical known to the state of California to cause cancer. California No Significant

Level: CAS# 75-09-2: no significant risk level = 50 ug/day

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols:

XN

Risk Phrases:

R 40 Possible risks of irreversible effects.

Safety Phrases:

S 24/25 Avoid contact with skin and eyes. S 36/37 Wear suitable protective clothin and gloves. S 23C Do not breathe vapour.

WGK (Water Danger/Protection)

CAS# 75-09-2: 2

Canada

CAS# 75-09-2 is listed on Canada's DSL/NDSL List.
This product has a WHMIS classification of D1B, D2A.
CAS# 75-09-2 is not listed on Canada's Ingredient Disclosure List.

Exposure Limits

CAS# 75-09-2: OEL-AUSTRALIA:TWA 100 ppm (350 mg/m3);Carcinogen OEL-AUSTRIA:TWA 100 ppm (360 mg/m3) OEL-BELGIUM:TWA 50 ppm (174 mg/m3); rcinogen OEL-CZECHOSLOVAKIA:TWA 500 mg/m3;STEL 2500 mg/m3 OEL-DENMA K:TWA 50 ppm (175 mg/m3);Skin;Carcinoge OEL-FINLAND:TWA 100 ppm (350 mg/m3);STEL 250 ppm (870 mg/m3) OEL-FRANCE:TWA 100 ppm (360 mg/m3);S EL 500 ppm (1800 mg/m3) OEL-GERMANY:TWA 100 ppm (360 mg/m3);Carcinoge n OEL-HUNGARY:STEL 10 mg/m3;Carcinogen OEL-JAPAN:TWA 100 ppm (350 mg /m3) OEL-THE NETHERLANDS:TWA 100 ppm (350 mg/m3);STEL 500 ppm OEL-TH E PHILIPINES:TWA 500 ppm (1740 mg/m3) OEL-POLAND:TWA 50 mg/m3 OEL-RU SSIA:TWA 100 ppm;STEL 50 mg/m3 OEL-SWEDEN:TWA 35 ppm (120 mg/m3);ST 70 ppm (25 mg/m3);Skin OEL-SWITZERLAND:TWA 100 ppm (360 mg/m3);STEL 500 ppm OEL-THAILAND:TWA 500 mg/m3;STEL 1000 mg/m3 OEL-TURKEY:TWA 5 0 ppm (1740 mg/m3) OEL-UNITED KINGDOM:TWA 100 ppm (350 mg/m3);STEL 2 0 ppm OEL IN BULGARIA, COLOMBIA, JORDAN, KOREA check ACGIH TLV OEL I N NEW ZEALAND, SINGAPORE, VIETNAM check ACGI TLV

Section 16 - Additional Information

MSDS Creation Date: 1/11/1995
Revision #51 Date: 6/30/1998

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