MATERIAL SAFETY DATA SHEET

Section 1 - Product and Company Information

MSDS Name: Dichloromethane Anhydrous 99.99%

Synonym: Methylene chloride; Methane dichloride; Methylene bichloride; Methylene dichloride; Dichloromethane; DCM.

Company: Shandong S-Sailing Chemical Co.,Ltd.

Section 2 - Composition/Information on Ingredient

CAS NO.	Chemical Name	content	EINECS#
75-09-2	Methylene chloride	99.99	200-838-9

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Limited evidence of a carcinogenic affect.

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, itching, and redness. Prolonged exposure may result in skin burns.

Ingestion:

Causes gastrointestinal irritation with nausea, vomiting and diarrhea. May cause central nervous system depression, characterized by excitement, followed by headache, dizziness, drowsiness, and nausea. Advanced stages may cause collapse, unconsciousness, coma and possible death due to respiratory failure. May cause carboxyhemoglobinemia.

Inhalation:

Inhalation of high concentrations may cause central nervous system effects characterized by nausea, headache, dizziness, unconsciousness and coma. Causes respiratory tract irritation. May cause narcotic effects in high concentration. Vapors may cause dizziness or suffocation. May cause blood changes. Overexposure may cause an increase in carboxyhemoglobin levels in the

blood. Can produce delayed pulmonary edema.

Chronic:

Possible cancer hazard based on tests with laboratory animals.

Prolonged or repeated skin contact may cause dermatitis. May cause reproductive and fetal effects. Laboratory experiments have resulted in mutagenic effects. Chronic exposure may cause lung, liver, and pancreatic tumors. May cause conjunctivitis and/or corneal burns.

Section 4 - First Aid Measures

Eyes: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical aid.

Skin:

In case of contact, flush skin with plenty of water. Remove contaminated clothing and shoes. Get medical aid if irritation develops and persists. Wash clothing before reuse.

Ingestion:

If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical aid.

Inhalation:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Notes to Physician:

Treat symptomatically and supportively.

Section 5 - Fire Fighting Measures

General Information:

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Use water spray to keep fire-exposed containers cool. No flash point in conventional closed tester, but forms flammable vapor-air mixtures in larger volumes and may be an explosion hazard in a confined space.

Extinguishing Media:

Use water spray, dry chemical, carbon dioxide, or appropriate foam.

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. vermiculite, sand or earth), then place in suitable container. Avoid runoff into storm sewers and ditches which lead to waterways. Clean up spills immediately, observing precautions in the Protective Equipment section. Remove all sources of ignition. Provide ventilation.

Section 7 - Handling and Storage

Handling:

Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid contact with heat, sparks and flame.

Use only with adequate ventilation. Avoid breathing vapor or mist.

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. Store below 40¶C. Keep away from active metals.

Section 8 - Exposure Controls / PPE

Engineering Controls:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Personal Protective Equipment Eyes: Wear chemical goggles.

Skin:

Wear appropriate protective gloves to prevent skin exposure.

Clothing:

Wear appropriate protective clothing to prevent skin exposure.

Respirators:

A respiratory protection program that meets OSHA's 29 CFR ??1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant a respirator's use.

Section 9 - Physical/Chemical Properties

Physical State: Liquid

Appearance: colorless liquid

Odor: ethereal odor - chloroform-like
pH: Not available.
Vapor Pressure: 350 mm Hg @ 20 deg C
Viscosity: Not available.
Boiling Point: 40 deg C
Freezing/Melting Point: -97 deg C
Autoignition Temperature: 556 deg C (1,032.80 deg F)
Flash Point: Not applicable.
Explosion Limits, lower: 13 vol %
Explosion Limits, upper: 23 vol %
Decomposition Temperature: Not available.
Solubility in water: Slightly soluble.
Specific Gravity/Density: 1.33 (Water=1)
Molecular Formula: CH2Cl2
Molecular Weight: 84.92

Section 10 - Stability and Reactivity

Chemical Stability:

Stable at room temperature in closed containers under normal storage and handling conditions. May form explosive mixtures in atmospheres having high oxygen content.

Conditions to Avoid:

Excess heat, attacks some plastics, rubber, and coatings, confined spaces.

Incompatibilities with Other Materials:

Strong oxidizing agents, strong bases, chemically active metals.

Hazardous Decomposition Products:

Hydrogen chloride, phosgene, carbon monoxide, carbon dioxide.

Hazardous Polymerization: Will not occur.

Section 11 - Toxicological Information

RTECS#:

CAS# 75-09-2: PA8050000 LD50/LC50:

CAS# 75-09-2: Draize test, rabbit, eye: 162 mg Moderate; Draize test, rabbit, eye: 10 mg Mild; Draize test, rabbit, eye: 500 mg/24H Mild; Draize test, rabbit, skin: 810 mg/24H Severe; Draize test, rabbit, skin: 100 mg/24H Moderate; Inhalation, mouse: LC50 = 14400 ppm/7H; Inhalation, rat: LC50 = 52 gm/m3; Oral, rat: LD50 = 1600 mg/kg.

Carcinogenicity:

Methylene chloride - 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 Other:
See actual entry in RTECS for complete information.

Section 12 - Ecological Information

Ecotoxicity:

Fish: Bluegill/Sunfish: 230mg/L; 24H; StaticFish: Fathead Minnow: 196mg/L; 96HThis chemical has a moderate potential to affect some aquatic organisms. 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.

Section 13 - Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

Section 14 - Transport Information

IATA
No information available.
IMO
No information available.
RID/ADR
No information available.

Section 15 - Regulatory Information

European/International Regulations
European Labeling in Accordance with EC Directives
Hazard Symbols: XN
Risk Phrases:
R 40 Limited evidence of a carcinogenic affect.
Safety Phrases:

S 23 Do not inhale gas/fumes/vapour/spray.
S 24/25 Avoid contact with skin and eyes.
S 36/37 Wear suitable protective clothing and
gloves.
WGK (Water Danger/Protection)
CAS# 75-09-2: 2
United Kingdom Occupational Exposure Limits
