

## **MATERIAL SAFETY DATA SHEET**

### **Section 1 - Product and Company Information**

MSDS Name: Methylene Chloride

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

Company: QINGDAO YLSCH INDUSTRY&TRADE CO., LTD.

Qingdao city, shandong Province, China

### **Section 2 - Composition/Information on Ingredient**

**Chemical Name: Methylene chloride**

**CAS NO.: 75-09-2**

**content: 99.99%**

**EINECS: 200-838-9**

P/I No.: SSMC171011KNT

Hazard Class: 6.1

Origin: China

### **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. P exposure may result in skin burns.

#### **Ingestion:**

Causes gastrointestinal irritation with nausea, vomiting and diarrhea. May cause central nervous depression, characterized by excitement, followed by headache, dizziness, drowsiness, and 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 headache, dizziness, unconsciousness and coma. Causes respiratory tract irritation. May cause effects in high concentration. Vapors may cause dizziness or suffocation. May cause blood coagulation. Overexposure may cause an increase in carboxyhemoglobin levels in the blood. Can produce 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 harm. Laboratory experiments have resulted in mutagenic effects. Chronic exposure may cause lung and pancreatic tumors. May cause conjunctivitis and/or corneal burns.

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**Section 4 - First Aid Measures**

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**Eyes:**

In case of contact, immediately flush eyes with plenty of water for at least 16 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.

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**Section 5 - Fire Fighting Measures**

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**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. This material is non-flammable 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:

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

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## Section 6 - Accidental Release Measures

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**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 and dispose of as waste. Do not allow runoff into storm sewers and ditches which lead to waterways. Clean up spills immediately, observe the appropriate safety precautions in the Protective Equipment section. Remove all sources of ignition. Provide ventilation.

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## Section 7 - Handling and Storage

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**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 open flames. 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, well-ventilated area away from incompatible substances. Store below 40°C. Keep away from active materials.

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## Section 8 - Exposure Controls / PPE

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**Engineering Controls:**

Facilities storing or utilizing this material should be equipped with an eyewash facility and shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below 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 use.

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## Section 9 - Physical/Chemical Properties

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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: CH<sub>2</sub>Cl<sub>2</sub>

Molecular Weight: 84.92

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## Section 10 - Stability and Reactivity

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### Chemical Stability:

Stable at room temperature in closed containers under normal storage and handling conditions. Stable in 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.

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## Section 11 - Toxicological Information

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### 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 test, rabbit, eye: 500 mg/24H Mild; Draize test, rabbit, skin: 810 mg/24H Severe; Draize test, skin: 100 mg/24H Moderate; Inhalation, mouse: LC50 = 14400 ppm/7H; Inhalation, rat: LC gm/m<sup>3</sup>; Oral, rat: LD50 = 1600 mg/kg.

### Carcinogenicity:

Methylene chloride - ACGIH: A3 - Animal Carcinogen California: carcinogen; initial date 4/1/88 occupational carcinogen NTP: Suspect carcinogen OSHA: Possible Select carcinogen IARC: G carcinogen Other:

See actual entry in RTECS for complete information.

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## Section 12 - Ecological Information

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### Ecotoxicity:

Fish: Bluegill/Sunfish: 230mg/L; 24H; StaticFish: Fathead Minnow: 196mg/L; 96HThis chemic moderate potential to affect some aquatic organisms. It is resistant to biodegradation, and h potential to persist in the aquatic environment. 96-hr. EC50 (loss of equilibrium); Fathead 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 observe level:1550 mg/L.

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## Section 13 - Disposal Considerations

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

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## Section 14 - Transport Information

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UN NO.: 1593                      Oil Pollution: NONE  
Hazard Class: 6.1                Marine Pollution: NONE  
Package type: III  
Packing Mark: Toxic Mark  
Package: Steel Drum

Cautions during trasportation: Before transportation, should check if the package is comp sealed. Take measures to avoid leak and damage during the transportation. Prevent from sola rain and high temperature.

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## Section 15 - Regulatory Information

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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

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United Kingdom Occupational Exposure Limits

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**Section 16 - Other Information**

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N/A