

Safety Data Sheet (MSDS)

(According to GB/T 16483, GB/T 17519, and GHS Standards)

SECTION 1: Identification

1.1 Product Identifiers

- Product Name: Chloromethane (Methyl Chloride)
- Product Number:CHL-20260330
- Brand:TECHPURE
- CAS-No.:74-87-3
- Synonyms: Methyl Chloride; Chloromethane

1.2 Supplier Information

- Company: CHEMTECH GASES CO., LIMITED
- Address: RM. 305, BUILDING 8, NO. 456, INDUSTRIAL PARK, SHANGHAI, CHINA
- Telephone: +86-021-50372288
- Fax: +86-021-50372299

1.3 Emergency Telephone

- Emergency Phone: +86-021-50372266 (CHEMTREC)

1.4 Uses & Restrictions

- Identified Uses: Chemical synthesis intermediate, refrigerant, laboratory reagent.
- Uses Advised Against: Unauthorized use as breathing gas, unventilated enclosed space use.

SECTION 2: Hazards Identification

2.1 GHS Classification

- Flammable gases (Category 1)
- Acute toxicity - Inhalation (Category 2)
- Skin irritation (Category 2)
- Eye irritation (Category 2)
- Carcinogenicity (Category 2B)
- Aquatic toxicity (Category 1)

2.2 GHS Label Elements

- Hazard Pictogram: Flame; Skull and crossbones; Irritant; Carcinogen; Environment; Gas cylinder
- Signal Word: Danger
- Hazard Statements: H220 (Extremely flammable gas); H331 (Toxic if inhaled); H315 (Causes skin irritation); H319 (Causes serious eye irritation); H351 (Suspected of causing cancer); H400 (Very toxic to aquatic life)
- Precautionary Statements: P210 (Keep away from heat/sparks); P230 (Keep container tightly closed); P260 (Do not breathe gas); P304+P340 (If inhaled: Remove to fresh air)

SECTION 3: Composition/Information on Ingredients



NEWAY SINOPHC TECH. LIMITED

ADD:RM. 204, BUILDING 3, NO. 188, AONARD., CHINA (SHANGHAI) PILOT FREE TRADE ZONE.
Email:marketing01@newayphc.com; Phone:+86-021-50350029 <https://www.newayphc.com>

- Substance / Mixture: Pure substance
- Active Component: Chloromethane (CAS 74-87-3)
- Concentration: $\geq 99.5\%$
- Impurities: $\leq 0.5\%$ (Dichloromethane, methanol, water)

SECTION 4: First Aid Measures

- Inhaled: Move to fresh air; give oxygen if needed; seek emergency medical attention.
- Skin Contact: No special treatment (gas phase); avoid cold burns from rapid expansion.
- Eye Contact: No special treatment (gas phase); flush with water if contaminated by liquid droplets.
- Swallowed: Not applicable (gas).

SECTION 5: Firefighting Measures

- Suitable Extinguishing Media: Dry powder, CO₂, foam.
- Unsuitable Extinguishing Media: Water jet (may spread fire).
- Special Hazards: Vapors are heavier than air; explosive when mixed with air; toxic fumes (HCl, CO) when burned.
- Advice for Firefighters: Wear self-contained breathing apparatus and full protective clothing.

SECTION 6: Accidental Release Measures

- Personal Precautions: Evacuate non-essential personnel; wear full PPE and gas detection equipment; eliminate ignition sources.
- Environmental Precautions: Prevent gas from entering watercourses or confined spaces.
- Clean-Up Methods: Ventilate area thoroughly; use gas detectors to confirm safety before re-entering.

SECTION 7: Handling and Storage

- Handling: Operate in well-ventilated areas with explosion-proof equipment; use leak-proof connections and pressure regulators.
- Storage: Cool, dry, well-ventilated warehouse ($\leq 30^{\circ}\text{C}$); keep cylinders upright, secured, away from heat/sparks/oxidizers.
- Incompatibilities: Strong oxidizers, metals, alkalis.

SECTION 8: Exposure Controls/Personal Protection

- PPE: Chemical safety goggles; anti-static clothing and gloves; organic vapor respirator (P100).
- Exposure Limits: TWA (8h): 100 ppm (OSHA); STEL (15min): 200 ppm (OSHA); IARC Group 2B.

SECTION 9: Physical and Chemical Properties

- Physical State: Gas; Color: Colorless; Odor: Faint sweet
- Melting Point: -97.7°C ; Boiling Point: -23.7°C ; Flash Point: -46°C
- Density (Gas, 20°C , 1 atm): 2.07 kg/m^3 ; Water Solubility: Slightly soluble (27.5 g/L at 25°C)
- Vapor Pressure: $> 1013\text{ kPa}$ (20°C); Explosive Limits: 8.1-17.2% (v/v)

- Autoignition Temperature: 632°C

SECTION 10: Stability and Reactivity

- Stability: Stable under normal conditions.
- Hazardous Reactions: Reacts violently with strong oxidizers, metals, and alkalis; decomposes at high temperature to release toxic gases.

SECTION 11: Toxicological Information

- Acute Toxicity: Inhalation (Rat, LC₅₀): 5300 ppm (4h); Oral (Rat, LD₅₀): > 1000 mg/kg
- Skin/Eye Irritation: Mild skin irritation; reversible eye irritation.
- Chronic Toxicity: Suspected carcinogen; long-term exposure may cause liver/kidney damage.

SECTION 12: Ecological Information

- Aquatic Toxicity: Fish (Zebrafish, LC₅₀): 100 mg/L (96h); Daphnia (EC₅₀): 150 mg/L (48h)
- Biodegradability: Moderately biodegradable (BOD₅ /COD = 0.3-0.4)

SECTION 13: Disposal Considerations

- Product Waste: Dispose as hazardous waste; burn in approved incineration facilities.
- Packaging Waste: Return empty cylinders to supplier for recycling or proper disposal.

SECTION 14: Transport Information

- UN Number: 1063
- UN Proper Shipping Name: CHLOROMETHANE
- Transport Hazard Class: 2.1 (Flammable gases)
- Packaging Group: I
- Marine Pollutant: Yes
- Transport Precautions: Transport in approved gas cylinders; secure upright; avoid collision and high temperature.

SECTION 15: Regulatory Information

- National Regulations: Hazardous Chemical Safety Management Regulation; Environmental Protection Law.
- International Regulations: GHS (Rev. 9); REACH (EU, listed); TSCA (US, listed); IMDG Code; IARC Group 2B.

SECTION 16: Other Information

- Revision Date:30 MAR 2026
- Disclaimer: This MSDS is based on current data; supplier not liable for improper use.