



Product Information (203) 740-3471 / Emergency Assistance CHEMTREC 1-800-424-9300

MATERIAL SAFETY DATA SHEETS

SECTION I

PRODUCT AND COMPANY IDENTIFICATION

PRODUCT: DICHLOROMETHANE

This MSDS is valid for all grades that start with catalog number 313

Synonyms: DCM; Methylene chloride (MC); Methylene dichloride; Methylene bichloride; Methane dichloride
Formula: CH₂Cl₂

Manufacturer: PHARMCO-AAPER
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Brookfield, CT 06804
Phone (203) 740-3471
Fax (203) 740-3481

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Phone (502) 633-0650
Fax (502) 6330685

Emergency Contact:
CHEMTREC 1-800-424-9300

SECTION II

COMPOSITION /INFORMATION ON INGREDIENTS

%wt	Material	CAS	Exposure Limits
100%	Methylene Chloride	75-09-2	OSHA PEL: 25 ACGIH TLV: 50 PPM

SECTION III

HAZARDS IDENTIFICATION

WARNING! HARMFUL IF SWALLOWED, INHALED OR ABSORBED THROUGH SKIN. AFFECTS CENTRAL NERVOUS SYSTEM, LIVER, CARDIOVASCULAR SYSTEM, AND BLOOD. CAUSES IRRITATION TO SKIN, EYES AND RESPIRATORY TRACT. SUSPECT CANCER HAZARD. MAY CAUSE CANCER. Risk of cancer depends on level and duration of exposure.

Inhalation: Causes irritation to respiratory tract. Has a strong narcotic effect with symptoms of mental confusion, light-headedness, fatigue, nausea, vomiting and headache. Causes formation of carbon monoxide in blood which affects cardiovascular system and central nervous system. Continued exposure may cause increased light-headedness, staggering, unconsciousness, and even death. Exposure may make the symptoms of angina (chest pains) worse.

Ingestion: May cause irritation of the gastrointestinal tract with

vomiting. If vomiting results in aspiration, chemical pneumonia could follow. Absorption through gastrointestinal tract may produce symptoms of central nervous system depression ranging from light-headedness to unconsciousness.

Skin Contact: Causes irritation, redness and pain. Prolonged contact can cause burns. Liquid degrades the skin. May be absorbed through skin.

Eye Contact: Vapors can cause eye irritation. Contact can produce pain, inflammation and temporal eye damage.

Chronic Exposure: Can cause headache, mental confusion, depression, liver effects, kidney effects, bronchitis, loss of appetite, nausea, lack of balance, and visual disturbances. Can cause dermatitis upon prolonged skin contact. Methylene chloride may cause cancer in humans.

Aggravation of Pre-existing Conditions:

Persons with pre-existing skin disorders, eye problems, impaired liver, kidney, respiratory or cardiovascular function may be more susceptible to the effects of this substance.

SECTION IV

FIRST AID

Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Ingestion: If swallowed, DO NOT INDUCE VOMITING. Give large quantities of water. Never give anything by mouth to an unconscious person. Get medical attention immediately.

Skin Contact: Immediately flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse.

Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

SECTION V

FIRE FIGHTING MEASURES

Fire: Autoignition temperature: 556C (1033F)

Flammable limits in air % by volume: lel: 12; uel: 23

Forms flammable vapor-air mixtures above 100C (212F).

Explosion: Concentrated can be ignited by a high intensity ignition source. Vapor may form flammable mixture in atmosphere that contains a high percentage of oxygen. Sealed containers may rupture when heated.

Fire Extinguishing Media: Dry chemical, foam or carbon dioxide. Water spray may be used to keep fire-exposed containers cool.

Special Information: In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing

apparatus with full-face piece operated in the pressure demand or other positive pressure mode. Combustion by-products include phosgene and hydrogen chloride gases. Structural firefighters' clothing provides only limited protection to the combustion products of this material.

SECTION VI

SPILL/ACCIDENTAL RELEASE MEASURES

Ventilate area of leak or spill. Remove all sources of ignition. Wear appropriate personal protective equipment as specified in Section 8. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Contain and recover liquid when possible. Use non-sparking tools and equipment. Collect liquid in an appropriate container or absorb with an inert material (e. g., vermiculite, dry sand, earth), and place in a chemical waste container. Do not use combustible materials, such as sawdust. Do not flush to sewer!

SECTION VII

HANDLING AND STORAGE

Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage. Isolate from any source of heat or ignition. Outside or detached storage is recommended. Containers of this material may be hazardous when empty since they retain product residues (vapors, liquid); observe all warnings and precautions listed for the product. To minimize decomposition, all storage containers should be galvanized or lined with a phenolic coating. This material may corrode plastic and rubber. Wear special protective equipment where exposures may exceed established exposure levels. Wash hands, face, forearms and neck when exiting restricted areas. Shower, dispose of outer clothing, change to clean garments at the end of the day. Avoid cross-contamination of street clothes. Wash hands before eating and do not eat, drink, or smoke in workplace. Odor Threshold: 205 - 307 ppm. The odor threshold only serves as a warning of exposure; not smelling it does not mean you are not being exposed

SECTION VIII

EXPOSURE CONTROLS / PERSONAL PROTECTION

Ventilation System:

A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area..

Personal Respirators (NIOSH Approved): If the exposure limit is exceeded, wear a supplied air, full-face piece respirator, airlined hood, or full-face piece self-contained breathing apparatus. The cartridges recommended for this material have a predicted service of less than 30 minutes at concentrations of ten times (10x) the exposure limits. Actual service life will vary considerably, depending on concentration levels, temperature, humidity, and work rate. This substance has poor warning properties.

Skin Protection: Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact. Neoprene is a recommended material for personal protective equipment.

Natural rubber and polyvinyl chloride ARE NOT recommended materials for personal protective equipment. Note: Breakthrough time for neoprene is less than 5 minutes; change gloves frequently or consult with a reputable glove supplier to select a glove with longer breakthrough times.

Eye Protection: Use chemical safety goggles and/or a full face shield where splashing is possible. Maintain eye wash fountain and quick-drench facilities in work area.

Other Control Measures: Do not use closed circuit re-breathing system employing soda lime or other carbon dioxide absorber because of formation of toxic compounds capable of producing cranial nerve paralysis.

SECTION IX

PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Clear, colorless liquid.

Odor: Chloroform-like odor.

Solubility: 1.32 gm/100 gm water @ 20C.

Specific Gravity: 1.318 @ 25C

pH: No information found.

% Volatiles by volume @ 21C (70F): 100

Boiling Point: 39.8C (104F)

Melting Point: -97C (-143F)

Vapor Density (Air=1): 2.9

Vapor Pressure (mm Hg): 400 @ 24C (75F)

Evaporation Rate (BuAc=1): 27.5

SECTION X

STABILITY/REACTIVITY INFORMATION

Stability: Stable under ordinary conditions of use and storage.

Hazardous Decomposition Products: Emits highly toxic fumes of phosgene when heated to decomposition. Decomposes in a flame or hot surface to form toxic gas phosgene and corrosive mists of hydrochloric acid. Carbon dioxide and carbon monoxide may form when heated to decomposition.

Hazardous Polymerization: Will not occur.

Incompatibilities: Strong oxidizers, strong caustics, plastics, rubber, nitric acid, water + heat, and chemically active metals, such as aluminum and magnesium powder, sodium, potassium, and lithium. Avoid contact with open flames and electrical arcs. Liquid methylene chloride will attack some forms of plastics, rubber, and coatings.

Conditions to Avoid: Moisture, heat, flames, ignition sources and incompatibles.

SECTION XI

DISPOSAL CONSIDERATIONS

Whatever cannot be saved for recovery or recycling should be handled as hazardous waste and sent to a RCRA approved incinerator or disposed in a RCRA approved waste facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

SECTION XII

TRANSPORTATION INFORMATION

DOT Information:

Proper Shipping Name: DICHLOROMETHANE

Hazard Class: 6.1

UN/NA: UN1593

Packing Group: III

IMO Information:

Proper Shipping Name: DICHLOROMETHANE

Hazard Class: 6.1

UN/NA: UN1593

Packing Group: III

**SECTION XIII
REGULATORY INFORMATION**

Federal EPA

Comprehensive Environmental Response Compensation, and Liability Act of 1980 (CERCLA) requires notification of the National Response Center of release quantities of Hazardous Substances equal to or greater than the reportable quantities (RQs) in CFR. Components present in this product at a level which could require reporting under this statute are:

Chemical	CAS Number	RQ
Methylene Chloride	75-09-2	1000 lbs

Superfund Amendments and Reauthorization Act of 1986

(SARA) Title III requires emergency planning based on threshold planning quantities and release reporting based on reportable quantities in 40 CFR 355 (used for SARA 302, 304, 311, and 312). Based upon available information, this material is classified as the following health and/or physical hazard according to section 311 & 312:

Immediate (Acute) Health Hazard,

Delayed (Chronic) Health Hazard,

Toxic Substances Control Act (TSCA) Status:

The ingredients of this product are not on the TSCA inventory.

California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute:

Dichloromethane

State Right to Know

THIS PRODUCT CONTAINS A CHEMICAL(S) KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER.

The information contained herein is based on data considered to be accurate. However, no warranty is expressed regarding the accuracy of these data or the results to be obtained from the use thereof. It is the user's obligation to determine the conditions of safe use of the product.