

MSDS Material Safety Data Sheet

TAPMATIC # 1

1. Product Identification

Synonyms: Methylene dichloride; Dichloromethane (DCM);

Chemical Formula: CH₂Cl₂

CAS No.: 75-09-2

UN No: 1593

EC No: 200-839-2

EC Index No: 602-004-00-3

Product Name:- Tapmatic Dual Action Plus #1

Product Use: Lubricant for Metalworking and Machining.

2. Composition/Information on Ingredients

Ingredients

CAS No

Methylene Chloride	75-09-2
LCCP's	63449-39-8
Naphthenic Oil	64742-52-5
Lanolin Oil	8006-54-0
Methyl sylicate	119-36-8

3. Hazards Identification

WARNING!

Harmful if swallowed, inhaled or absorbed through the skin, affects central nervous system liver, cardiovascular system and blood, causes irritation to skin, eyes and respiratory tract.

		Sundhedsskadelig Gesundheitszshädlich Επιβλαβεζ Harmful Nocif Schadelijk		
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Health Rating: 3 - Severe

Flammability Rating: 1 – Slight

Reactivity Rating: 1 – Slight

Contact Rating: 2 – Moderate

Lab Protective Equip: Goggles, Lab Coat, Vent Hood; Proper gloves -----

Potential Health Effects

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.

4. First Aid Measures

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. Never give anything by mouth to an unconscious person. Get medical attention immediately

Skin Contact: Immediately flush skin with plenty of soap and water while removing contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse.

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

5. Fire Fighting Measures

Fire: Autoignition temperature: 556C (1033F) 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 facepiece 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.

6. 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 saw dust. Do not flush to sewer

7. 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 (Sec. 8) for maintenance break-in or 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!

8. Exposure Controls/Personal Protection

Airborne Exposure Limits: Methylene Chloride (Dichloromethane): - OSHA Permissible Exposure Limit (PEL) - 25 ppm (TWA), 125 ppm (STEL), 12.5 ppm (8-hour TWA - Action Level) - ACGIH Threshold Limit Value (TLV) - 50 ppm (TWA), A2 - suspected human carcinogen.

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. Please refer to the ACGIH document, *Industrial Ventilation, A Manual of Recommended Practices*, most recent edition, for details.

Personal Respirators (NIOSH Approved): If the exposure limit is exceeded, wear a supplied air, full-facepiece respirator, airtight hood, or full-facepiece 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.

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 rebreathing system employing soda lime or other carbon dioxide absorber because of formation of toxic compounds capable of producing cranial nerve paralysis. See OSHA Standard for medical surveillance, record keeping, and reporting requirements for methylene chloride (29 CFR 1910.1052).



9. Physical and Chemical Properties

Appearance: Clear, colorless liquid.

Odor: Chloroform-like odor.

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

Specific Gravity: 1.33 @ 15C/4C

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): 350 @ 20C (68F)

Evaporation Rate (BuAc=1): 27.5

10. Stability and Reactivity

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

11. Toxicological Information

Toxicological Data: Dichloromethane: Oral rat LD50: 1600 mg/kg; inhalation rat LC50: 52 gm/m³; investigated as a tumorigen, mutagen, reproductive effector.

Reproductive Toxicity: Dichloromethane has been linked to spontaneous abortions in humans.

12. Ecological Information

Environmental Fate: When released into the soil, this material may leach into groundwater. When released into the soil, this material is expected to quickly evaporate. When released into water, this material may biodegrade to a moderate extent. When released to water, this material is expected to quickly evaporate. This material has a log octanol-water partition coefficient of less than 3.0. This material is not expected to significantly bioaccumulate. When released into the air, this material may be moderately degraded by reaction with photochemically produced hydroxyl radicals. When released into the air, this material is expected to have a half-life of greater than 30 days. When released into the air, this material may be removed from the atmosphere to a moderate extent by wet deposition.

Environmental Toxicity: The LC50/96-hour values for fish are over 100 mg/l. This material is not expected to be toxic to aquatic life.

13. 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.

14. Transport Information

Domestic (Land, D.O.T.) **Proper Shipping Name:** DICHLOROMETHANE

Hazard Class: 6.1 **UN/NA:** UN1593 **Packing Group:** III

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 10/4/82, Sunset 10/4/92

Chemical Test Rules

None of the chemicals in this product are under a Chemical Test Rule.

Section 12b

CAS# 75-09-2: Section 4, 0.1 % de minimus concentration

TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

CERCLA Hazardous Substances and corresponding RQs

CAS# 75-09-2: 1000 lb final RQ; 454 kg final RQ

SARA Section 302 Extremely Hazardous Substances

None of the chemicals in this product have a TPQ.

SARA Codes

CAS # 75-09-2: immediate, delayed.

Section 313

This material contains Methylene chloride (CAS# 75-09-2, >99.5%), which is subject to 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 Ozone depletors.

Clean Water Act:

None of the chemicals in this product are listed as Hazardous Substances under the CWA. CAS# 75-09-2 is listed as a Priority Pollutant under the Clean Water Act. CAS# 75-09-2 is listed as a Toxic Pollutant under the Clean Water Act.

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, New Jersey, Pennsylvania, Minnesota, Massachusetts.

California Prop 65

The following statement(s) is(are) made in order to comply with the California Safe

Drinking Water Act:

WARNING: This product contains Methylene chloride, a chemical known to the state of California to cause cancer.

California No Significant Risk Level: CAS# 75-09-2: 200 æg/day NSRL (inhalation); 50 æg/day NSRL

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols:

XN

Risk Phrases:

R 40 Limited evidence of a carcinogenic effect.

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

Canada - DSL/NDSL

CAS# 75-09-2 is listed on Canada's DSL List.

Canada - WHMIS

This product has a WHMIS classification of D2A.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

Canadian Ingredient Disclosure List

CAS# 75-09-2 is listed on the Canadian Ingredient Disclosure List.

16. Other Information

NFPA Ratings: Health: **3** Flammability: **1** Reactivity: **1**

Label Hazard Warning Harmful if swallowed, inhaled or absorbed through the skin, affects central nervous system liver, cardiovascular system and blood, causes irritation to skin, eyes and respiratory tract.

Label Precautions: Do not breathe vapour. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling. Keep away from heat and flame. Do not get in eyes, on skin, or on clothing. Please adhere to all warning labels and recommendations printed on the cans.

Label First Aid: If swallowed, DO NOT INDUCE VOMITING, never give anything by mouth to an unconscious person. If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. In case of contact, immediately flush eyes or skin with plenty of water while removing contaminated clothing and shoes. Wash clothing before reuse. In all cases, get medical attention.

Product Use: Lubricant for Metalworking and Machining.

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