



5515 North Service Rd. #306  
Burlington, Ontario L7L 6G4

Phone: 905-337-7411  
Fax: 905-337-1686

megaloid.ca



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Our commitment to sustainability.



**Responsible Distribution Canada**  
Leaders in Chemicals and Ingredients

## 1. IDENTIFICATION

**Name:** *Methylene Chloride*

**Synonyms:** *dichloromethane; methylene dichloride; methylene bichloride*

**CAS#** 75-09-2

**Product Uses:** *Cleaning solvent, paint stripper, refrigeration heat transfer fluid.*

**Uses Advised Against:** *This chemical/product is not and cannot be distributed in commerce (as defined in TSCA section 3(5)) or processed (as defined in TSCA section 3(13)) for consumer paint or coating removal.*

**Supplier Identifier:** *Megaloid Laboratories Limited  
5515 North Service Road, Suite 306  
Burlington, Ontario, Canada  
L7L 6G4  
Phone: 905-337-7411 / Fax: 905-337-1686*

### EMERGENCY INFORMATION

**Call CHEMTREC - (800) 424-9300 (CCN # 693764)**

## 2. HAZARD IDENTIFICATION

<b>GHS Class</b> <i>(category)</i>	<b>Acute oral</b> <i>(4)</i>	<b>Skin irritant</b> <i>(2)</i>	<b>Eye irritant</b> <i>(2A)</i>	<b>Carcinogenic</b> <i>(2)</i>	<b>STOT</b> <i>(3)</i>	<b>STOT</b> <i>(2)</i>
<b>Signal Word</b>	<b>WARNING</b>					
<b>Hazard Statements</b>	<i>Harmful if swallowed (H302)</i>	<i>Causes skin irritation (H315)</i>	<i>Causes severe eye irritation (P319)</i>	<i>Suspected of causing cancer (351)</i>	<i>May cause dizziness or drowsiness (H336)</i>	<i>May cause damage to liver, kidneys on repeated exposure (H373)</i>



**Label Pictograms**

## GHS Precautionary Statements for Labelling

<b>P200</b>	Obtain special instructions before use
<b>P202</b>	Do not handle until all safety precautions have been read & understood
<b>P233</b>	Keep container tightly closed.
<b>P242</b>	Use only non-sparking tools.
<b>P243</b>	Take precautionary measures against static discharge.
<b>P260, P262, P264</b>	Do not breathe vapours. Do not get in eyes or on skin. Wash thoroughly after handling
<b>P270</b>	Do not eat, drink or smoke when using this product.
<b>P280</b>	Wear eye protection, protective gloves and clothing of butyl rubber
<b>Response</b>	
<b>P301, P310, P330</b>	IF SWALLOWED: Rinse mouth, do not induce vomiting, immediately call a doctor.
<b>P304, P340</b>	IF INHALED: remove person to fresh air and keep comfortable for breathing.
<b>P313, P332</b>	IF skin irritation occurs: get medical advice / attention.
<b>P305, P351, P338</b>	IF IN EYES: rinse cautiously with water or several minutes. Remove contact lenses, if present & easy to do. Continue rinsing..
<b>P361, P364</b>	Take off immediately all contaminated clothing & wash it before reuse.
<b>Storage</b>	
<b>P403 + P233</b>	Store in a well-ventilated place. Keep container tightly closed.
<b>P405</b>	Store locked up.
<b>Disposal</b>	
<b>P501</b>	Dispose of contents and container in accordance with local, regional, national and international regulations.

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name:	CAS No.	%	Other Identifiers
<i>Dichloromethane</i>	<i>75-09-2</i>	<i>100</i>	<i>EC # 200-838-9</i>

### 4. FIRST AID MEASURES

#### Inhalation

Remove from contaminated area promptly. CAUTION: Rescuer must not endanger himself! If breathing stops, administer artificial respiration and seek medical aid promptly.

#### Skin Contact

Wash with plenty of water. Remove contaminated clothing and do not reuse until thoroughly laundered.

#### Eye Contact

Wash eyes with plenty of water, holding eyelids open. Seek medical assistance if there is any irritation.

## Ingestion

Give plenty of water to dilute product. Do not induce vomiting (NOTE below). Keep victim quiet. If vomiting occurs, lower victim's head below hips to prevent inhalation of vomited material. Seek medical help promptly.

### **First-aid Comments**

*Inadvertent inhalation of vomited material may seriously damage the lungs. The danger of this is greater than the risk of poisoning through absorption of this relatively low-toxicity substance. The stomach should only be emptied under medical supervision, and after the installation of an airway to protect the lungs.*

## **Most important symptoms and effects, both acute and delayed**

High atmospheric concentrations will lead to anaesthetic effects and adverse effects on the central nervous system. Symptoms may include light headedness, nausea, vomiting and headache. Continued or high exposures by inhalation will cause anaesthetic effects. This may result in a loss of consciousness and could prove fatal.

## **Notes to physician**

Remove contaminated clothing immediately. Maintain adequate ventilation and oxygenation of the patient. Seek medical treatment when anyone has symptoms due to inhalation, contact with skin or eyes, or swallowing. Do not administer sympathomimetic drugs such as epinephrine unless absolutely necessary. No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

## **5. FIRE FIGHTING MEASURES**

### **Extinguishing Media**

#### ***Suitable Extinguishing Media***

*Foam, dry chemical, water fog, water spray.*

#### ***Unsuitable Extinguishing Media***

*None known*

### **Specific Hazards Arising from the Product**

Container may vent and/or rupture due to fire. Although this material does not have a flash point, it can burn at room temperature. Vapors are heavier than air and may travel a long distance and accumulate in low lying areas.

### **Combustion Products**

During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating. Combustion products may include and are not limited to: Hydrogen chloride. Carbon monoxide. Carbon dioxide.

Combustion products may include trace amounts of: Phosgene. Chlorine.

### **Special Protective Equipment and Precautions for Fire-fighters**

Firefighters must wear SCBA. Fire-fighters may enter the area if positive pressure SCBA and full Bunker Gear is worn.

## **6. ACCIDENTAL RELEASE MEASURES**

### **Personal Precautions, Protective Equipment, and Emergency Procedures**

Evacuate the area immediately. Isolate the hazard area. Keep out unnecessary and unprotected personnel. Eliminate all ignition sources. Use grounded, explosion-proof equipment. Increase ventilation to area or move leaking container to a well-ventilated and secure area.

### Environmental Precautions

Material will sink in water. Prevent from entering into soil, ditches, sewers, waterways and/or groundwater.

### Methods and Materials for Containment and Cleaning Up

Leak Precaution: dyke to control spillage and prevent environmental contamination.

Handling Spill: Ventilate contaminated area; recover free liquid with suitable pumps; absorb residue on an inert sorbent, sweep & pick up using plastic or aluminium shovel, & store in closed containers for recycling or disposal.

### Other Information

Report spills to local health, safety and environmental authorities, as required.

## 7. HANDLING & STORAGE

### Precautions for Safe Handling

Avoid breathing product vapour. Use with adequate ventilation. If dealing with a spill, ventilate area well, wear a suitable respirator (see Part 8). Wear an air-supplied respirator if temperature exceeds 30°C, or if good ventilation cannot be assured.

This product should be used in a closed apparatus or with very effective exhaust ventilation. Avoid all contact with skin & wash work clothes frequently. An eye bath & safety shower must be available near the workplace. The odour threshold is higher than the exposure limit. Routine wearing of a respirator is hazardous; when the wearer detects methylene chloride, the exposure limit has been exceeded! Only wear a respirator for emergencies (eg: spill clean up). Always use a fresh absorber cartridge!

Never cut, drill, weld or grind on or near this container. Avoid contact with skin & wash work clothes frequently. An eye bath must be available near the workplace.

### Conditions for Safe Storage

*Warning – Methylene Chloride has a low boiling point. Never store in direct sunlight – drums may overheat and burst!*

Store below 30°C / 85°F, away from substances named in Part 10. Ensure containers, empty or full, are tightly sealed unless in use. Before opening drums make sure the drum heads are not bulging outwards. When opening, loosen bung slowly, releasing any pressure which may have developed inside the drum.

## 8. EXPOSURE CONTROL & PERSONAL PROTECTION

**Ontario TWAEV** 50ppm / 175mg/m<sup>3</sup>  
**ACGIH TLV** 50ppm / 175mg/m<sup>3</sup>  
**OSHA PEL** 25ppm / 88mg/m<sup>3</sup>

**Ontario STEV** not listed  
**ACGIH STEL** not listed  
**OSHA STEL** 125ppm / 435mg/m<sup>3</sup>

### Ventilation

*Mechanical ventilation is required to control airborne titre to regulated limits; respirators with organic vapour cartridges should be available for all workers in the area should ventilation or vapour containment fail (store respirators in air-tight “Zip Lock” or “Tupperware”) to maintain “freshness”).*

<b>Hands</b>	<i>Polyvinyl alcohol, "Trelchem HPS", or "Tychem" gloves offer 8-hr resistance – other types also protect; consult supplier for suitability</i>
<b>Eyes</b>	<i>Safety glasses with side shields – always protect the eyes</i>
<b>Clothing</b>	<i>Wear impermeable (above) apron, boots, &amp; long sleeves if there is any danger of splashing.</i>

#### Appropriate Engineering Controls

Provide local exhaust or process enclosure ventilation system. Ensure compliance with applicable exposure limits. Monitoring should be performed regularly in accordance with 29 CFR 1910.1052(d) to determine exposure level(s).

## 9. PHYSICAL & CHEMICAL PROPERTIES

<b>Appearance</b>	<i>Clear colourless liquid.</i>
<b>Odour</b>	<i>mild, pleasant</i>
<b>Odour threshold</b>	<i>200-300 ppm (causes olfactory fatigue).</i>
<b>pH</b>	<i>Neutral</i>
<b>Melting Point/Freezing Point</b>	<i>-97 °C (-143 °F) (Dichloromethane) (freezing)</i>
<b>Initial Boiling Point/Range</b>	<i>40 °C (104 °F)</i>
<b>Flash Point</b>	<i>Not applicable</i>
<b>Evaporation Rate</b>	<i>14.5</i>
<b>Flammability ( Solid, Gas)</b>	<i>Not Available</i>
<b>Upper/Lower Flammability or Explosive Limit</b>	<i>19% (upper); 12% (lower)</i>
<b>Vapour Pressure</b>	<i>349 mm Hg at 20 °C (Dichloromethane)</i>
<b>Vapour Density (air = 1)</b>	<i>3</i>
<b>Relative Density (water = 1)</b>	<i>1.329 at 20 °C (68 °F)</i>
<b>Solubility</b>	<i>13 g/L in water; Soluble in all proportions in common organic solvents.</i>
<b>Partition Coefficient, n-Octanol/Water (Log Kow)</b>	<i>1.25</i>
<b>Auto-ignition Temperature</b>	<i>556 °C (1033 °F)</i>
<b>Decomposition Temperature</b>	<i>120 °C (248 °F)</i>
<b>Viscosity</b>	<i>0.4 centipoises at 20 °C (68 °F) (dynamic)</i>
<b>Physical State</b>	<i>Liquid</i>
<b>Molecular Weight</b>	<i>85 grams per mole</i>

<b>Molecular Formula</b>	CH <sub>2</sub> Cl <sub>2</sub>
<b>Other Physical Property 1</b>	<i>Pleasant odour increases danger; ALSO odour threshold is 3 times the exposure limit!</i>
<b>Other Physical Property 2</b>	<i>Dichloromethane will not flash - burns in fire above 102 deg C / 214 deg. F; will not sustain combustion.</i>

## 10. STABILITY AND REACTIVITY

**Dangerously Reactive** - strong oxidizers may cause explosion; reacts with amines releasing heat; forms explosive substances with alkali metals (Na, K, Li) & N<sub>2</sub>O<sub>4</sub> or N<sub>2</sub>O<sub>5</sub> & nitric acid.

**Also** is flammable in air in the presence of >0.5% methanol; corrodes some metals at elevated temperature in the presence of moisture; attacks many plastics, epoxies & elastomers.

### Chemical Stability

Stable; will not polymerize

### Possibility of Hazardous Reactions

Decomposes gradually in the presence of water to form hydrochloric acid.

### Hazardous Decomposition Products

Phosgene and hydrogen chloride form in fire

## 11. TOXICOLOGICAL INFORMATION

Prolonged exposure may cause dermatitis; prolonged inhalation (500-1000ppm) has caused some neurological problems: balance, speech, vision, confusion; metabolism of dichloromethane creates carbon monoxide, possibly responsible for some of above; liver & kidney damage was seen in rats exposed to methylene chloride vapour, but no such effect was seen in exposed human workers. Therefore, not classified for kidney or liver toxicity.

Acute Toxicity	
<b>LD<sub>50</sub> (oral)</b>	2280mg/kg (♂rat), 1400mg/kg (♀rat), >2000mg/kg (rat) – no mortality or adverse symptoms reported
<b>LD<sub>50</sub> (skin)</b>	>2000mg/kg (rabbit) – no mortality or adverse symptoms reported
<b>LC<sub>50</sub> (inhalation)</b>	13,500-19,800ppm (rat), 14,080, 17,365-20,375ppm (mouse), 14,205ppm (guinea pig)

### Skin Corrosion/Irritation

Skin contact - severely irritating – rapid evaporation may prevent this; prolonged contact caused by material trapped against skin may cause chemical burns

### Serious Eye Damage/Irritation

Irritating; vapour irritating at 500ppm; temporary eye damage has been reported

### STOT (Specific Target Organ Toxicity) - Single Exposure

#### Inhalation

200ppm caused dizziness & nausea, plus impaired co-ordination; irritating above 500ppm; headache, dizziness, drowsiness, intoxication, nausea, may occur; high concentrations may cause pulmonary edema & eventual death; High vapour pressure increases risk of injury from inhalation.

#### Skin Absorption

Slight; no toxic effects likely by this route

**Ingestion**

Irritation of mouth and throat, possibly leading to swelling – not a route of industrial exposure

**STOT (Specific Target Organ Toxicity) - Repeated Exposure**

**Respiratory and/or Skin Sensitization**

Not a sensitizer in humans or animals.

**Carcinogenicity**

IARC: Group 2A – Probably carcinogenic to humans. ACGIH®: A3 – Confirmed animal carcinogen.

NTP: Reasonably anticipated human carcinogen. OSHA: Listed.

**Reproductive Toxicity**

**Development of Offspring**

Not fetotoxic, fetotoxic in rodents only in presence of maternal toxicity

**Sexual Function and Fertility**

Testicular atrophy in rats; reduced sperm count in men exposed to dichloromethane

**Germ Cell Mutagenicity**

Mutagen in rodents and human cell culture; no evidence of mutagenic or teratogenic activity resulting from industrial exposure; not considered a mutagen or teratogen<sup>1</sup>. Therefore, not classified for reproductive toxicity or as a mutagen or teratogen

**12. ECOLOGICAL INFORMATION**

<b>Bioaccumulation</b>	<i>Methylene chloride is metabolized or otherwise eliminated and cannot bio accumulate</i>
<b>Persistence and Degradability</b>	<b>Biodegradation -</b> <i>Biodegradation readily &amp; rapidly in the presence of oxygen; &gt;50% in 2 days, 68% in 28 days, 99% in 6 days, 100% in 4 days &amp; other results; anaerobic biodegradation with ½-life of 11 days</i>  <b>Abiotic Degradation -</b> <i>is slow and variable.</i>
<b>Mobility in soil, water</b>	<i>Sufficiently water soluble to move readily in soil &amp; water; adsorbs strongly to peat; rapid evaporation limits movement</i>
<b>Aquatic Toxicity</b>	
<b>LC50 (Fish, 96hr)</b>	<i>193 &amp; 220mg/l (Lepomis macrochirus), 177, 193, 310, 330 &amp; 502mg/litre (Pimephelas promelas), 330mg/litre (Cyprinodon variegatus) &amp; others</i>
<b>EC50 (Crustacea, 48hr)</b>	<i>27, 135, 190, 220, 270 &amp; 1682mg/l (Daphnia magna), 109mg/litre (Palaemonetes pugio), 122 &amp; 510mg/litre (Artemia salina)</i>
<b>EC50 (Algae)</b>	<i>2300mg/litre (Chlorella vulgaris), &gt;660mg/litre (Selenastrum capricornutum &amp; Skeletonema costatum)</i>
<b>EC50 (Bacteria)</b>	<i>2.9mg/litre (Photobacterium phosphoreum), 2590mg/litre (domestic sewage sludge)</i>

### 13. DISPOSAL CONSIDERATIONS

**Water Disposal**

**Do not flush to sewer**, may be incinerated in approved facility with flue gas monitoring and scrubbing.

**Containers**

**Drums** should be reused. Recondition and pressure test by a licensed reconditioner prior to re-use.


**Pails** must be vented and thoroughly dried prior to crushing and recycling.

**IBCs** (intermediate bulk containers): polyethylene bottle must be pressure tested & recertified at 30 months. Replace at 60 months (5yrs).

**Steel containers** must be inspected, pressure tested & recertified every 5 years.

***Never cut, drill, weld or grind on or near this container, even if empty***

### 14. TRANSPORT INFORMATION

<b>Canada TDG</b>	<b>PIN</b>	UN1593	
<b>AND</b>	<b>Shipping Name</b>	Dichloromethane	
<b>U.S.A. 49 CFR</b>	<b>Class &amp; Packing Group</b>	6.1, PG III	
<b>Marine Pollutant ERAP Required Reportable Quantity E R G No.</b>	Not a Marine Pollutant NO 1000 lbs (454 kg) 160		

***Important Note: Shipping descriptions may vary based on mode of transport, quantities, package size, and/or origin and destination. Consult your company's Hazardous Materials/Dangerous Goods expert for information specific to your situation.***

### 15. REGULATORY INFORMATION

<b>Canada DSL</b>	On Inventory
<b>U.S.A. TSCA</b>	On Inventory
<b>Europe EINECS</b>	On Inventory

**Canadian Regulations**

**CEPA - National Pollutant Release Inventory (NPRI)**  
Part 1A, Part 5.



## U.S.A. Regulations

**Immediately Dangerous to Life or Health:** NIOSH considers methylene chloride a potential occupational carcinogen.

**SARA 302 Components:** No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components:** The following components are subject to reporting levels established by SARA Title III, Section 313: Dichloromethane, 75-09-2

**SARA 311/312 Hazards:** Acute Health Hazard - Chronic Health Hazard

**California Prop. 65:** WARNING! This product contains a chemical known to the State of California to cause cancer. Dichloromethane, 75-09-2

**OSHA Standards:** Permissible exposure limits (PELs) - (1) Eight-hour time-weighted average (TWA) PEL. The employer shall ensure that no employee is exposed to an airborne concentration of MC /methylene chloride/ in excess of twenty-five parts of MC per million parts of air (25 ppm) as an 8-hour TWA. (2) Short-term exposure limit (STEL). The employer shall ensure that no employee is exposed to an airborne concentration of MC in excess of one hundred and twenty-five parts of MC per million parts of air (125 ppm) as determined over a sampling period of fifteen minutes. [REF-257]

**NIOSH Recommendations:** NIOSH considers methylene chloride a potential occupational carcinogen and recommends that occupational exposures to carcinogens be limited to the lowest feasible concentration.

**Threshold Limit Values:** 8 hr Time Weighted Avg (TWA): 50 ppm. Excursion Limit

Recommendation: Excursions in worker exposure levels may exceed 3 times the TLV-TWA for no more than a total of 30 minutes during a work day, and under no circumstances should they exceed 5 times the TLV-TWA, provided that the TLV-TWA is not exceeded. A3; Confirmed animal carcinogen with unknown relevance to humans. Biological Exposure Index (BEI): Determinant: dichloromethane in urine; Sampling Time: end of shift; BEI: 0.3 mg/L. Notation: The biological determinant is an indicator of exposure to the chemical, but the quantitative interpretation of the measurement is ambiguous. These determinants should be used as a screening test if a quantitative test is not practical, or as a confirmatory test if the quantitative test is not specific and the origin of the determinant is in question.

**Atmospheric Standards:** This action promulgates standards of performance for equipment leaks of Volatile Organic Compounds (VOC) in the Synthetic Organic Chemical Manufacturing Industry (SOCMI). The intended effect of these standards is to require all newly constructed, modified, and reconstructed SOCMI process units to use the best demonstrated system of continuous emission reduction for equipment leaks of VOC, considering costs, non-air quality health and environmental impact and energy requirements. Methylene chloride is produced, as an intermediate or a final product, by process units covered under this subpart. Methylene chloride has been designated as a hazardous air pollutant under section 112 of the Clean Air Act.

**Federal Drinking Water Standards:** Maximum contaminant levels (MCL) for organic contaminants apply to community and non-transient, non-community water systems: Chemical, MCL 0.005 mg/L. EPA 5 ug/L

**Federal Drinking Water Guidelines:** The maximum contaminant level goal (MCLG) for the following organic contaminant is zero mg/L: dichloromethane.

**State Drinking Water Standards:** New Jersey 2 ug/L

**State Drinking Water Guidelines:** Arizona 4.7 ug/L Connecticut 5 ug/L Maine 47 ug/L Minnesota 5 ug/L

**Clean Water Act Requirements:** Toxic pollutant designated pursuant to section 307(a)(1) of the Federal Water Pollution Control Act and is subject to effluent limitations. /Halomethanes/

**CERCLA Reportable Quantities:** Persons in charge of vessels or facilities are required to notify the National Response Centre (NRC) immediately, when there is a release of this designated hazardous substance, in an amount equal to or greater than its reportable quantity of 1000 lb or 454 kg. The toll free number of the NRC is (800) 424-8802. The rule for determining when notification is required is stated in 40 CFR 302.4 (section IV. D.3.b).

**TSCA Requirements:** Pursuant to section 8(d) of TSCA, EPA promulgated a model Health and Safety Data Reporting Rule. The section 8(d) model rule requires manufacturers, importers, and processors of listed chemical substances and mixtures to submit to EPA copies and lists of unpublished health and safety studies. Dichloromethane is included on this list. Effective date:

10/4/82; Sunset date: 10/4/92. This chemical/product is not and cannot be distributed in commerce (as defined in TSCA section 3(5)) or processed (as defined in TSCA section 3(13)) for consumer paint or coating removal.

**RCRA Requirements:** When dichloromethane is a spent halogenated solvent, it is classified as a hazardous waste from a nonspecific source (F002), as stated in 40 CFR 261.31, and must be managed according to state and/or federal hazardous waste regulations. As stipulated in 40 CFR 261.33, when dichloromethane, as a commercial chemical product or manufacturing chemical intermediate or an off-specification commercial chemical product or a manufacturing chemical intermediate, becomes a waste, it must be managed according to Federal and/or State hazardous waste regulations. Also defined as a hazardous waste is any residue, contaminated soil, water, or other debris resulting from the cleanup of a spill, into water or on dry land, of this waste. Generators of small quantities of this waste may qualify for partial exclusion from hazardous waste regulations (40 CFR 261.5).

**FIFRA Requirements:** As the federal pesticide law FIFRA directs, EPA is conducting a comprehensive review of older pesticides to consider their health and environmental effects and make decisions about their continued use. Under this pesticide reregistration program, EPA examines newer health and safety data for pesticide active ingredients initially registered before November 1, 1984, and determines whether the use of the pesticide does not pose unreasonable risk in accordance to newer safety standards, such as those described in the Food Quality Protection Act of 1996. Pesticides for which EPA had not issued Registration Standards prior to the effective date of FIFRA '88 were divided into three lists based upon their potential for human exposure and other factors, with List B containing pesticides of greater concern than those on List C, and with List C containing pesticides of greater concern than those on List D. Methylene chloride is found on List C. Case No: 3090; Pesticide type: insecticide; Case Status: No products containing the pesticide are actively registered ... The case /is characterized/ as "cancelled." Under FIFRA, pesticide producers may voluntarily cancel their registered products. EPA also may cancel pesticide registrations if registrants fail to pay required fees or make/meet certain reregistration commitments, or if EPA reaches findings of unreasonable adverse effects; Active ingredient (AI): Methylene chloride; AI Status: The active ingredient is no longer contained in any registered pesticide products ... "cancelled."

**FDA Requirements:** Certification of this colour additive when used as an ink for marking fruit and vegetables is not necessary for the protection of the public health, and therefore batches thereof are exempt from the certification pursuant to section 721(c) of the act. Restriction: No residues. Dichloromethane is an indirect food additive for use only as a component of adhesives. Use of methylene chloride as an ingredient of cosmetic products. (a) Methylene chloride has been used as an ingredient of aerosol cosmetic products, principally hair sprays, at concentrations generally ranging from 10 to 25 percent. In a 2-year animal inhalation study sponsored by the National Toxicology Program, methylene chloride produced a significant increase in benign and malignant tumors of the lung and liver of male and female mice. Based on these findings and on estimates of human exposure from the customary use of hair sprays, the Food and Drug Administration concludes that the use of methylene chloride in cosmetic products poses a significant cancer risk to consumers, and that the use of this ingredient in cosmetic products may render these products injurious to health. (b) Any cosmetic product that contains methylene chloride as an ingredient is deemed adulterated and is subject to regulatory action under sections 301 and 601(a) of the Federal Food, Drug, and Cosmetic Act.

## 16. OTHER INFORMATION

<b>NFPA RATING</b>	<b>Health 2</b>	<b>Flammability 1</b>	<b>Instability 0</b>
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**Preparation Date:** March 2002

**Revision Dates:** Feb 2005, Jan 2008, Jan 2011, Nov 2013, Nov 2016, Oct 2017, Feb 2019, August 2019

<b>Key to Abbreviations</b>	ACGIH® = American Conference of Governmental Industrial Hygienists AIHA® = AIHA® Guideline Foundation HSDB® = Hazardous Substances Data Bank IARC = International Agency for Research on Cancer NFPA = National Fire Protection Association NIOSH = National Institute for Occupational Safety and Health NTP = National Toxicology Program OSHA = US Occupational Safety and Health Administration RTECS® = Registry of Toxic Effects of Chemical Substances
<b>References</b>	CHEMINFO database. Canadian Centre for Occupational Health and Safety (CCOHS). HSDB® database. US National Library of Medicine. Available from Canadian Centre for Occupational Health and Safety (CCOHS). NIOSH Pocket Guide database. National Institute for Occupational Safety and Health. Available from Canadian Centre for Occupational Health and Safety (CCOHS). Registry of Toxic Effects of Chemical Substances (RTECS®) database. Dassault Systèmes/BIOVIA (“BIOVIA”). Available from Canadian Centre for Occupational Health and Safety (CCOHS).
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