



Centre Anti-Poison pour le Québec: (800) 463-5060

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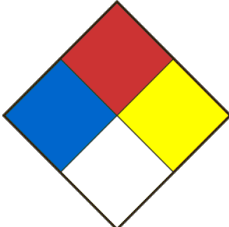
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SAFETY DATA SHEET

SECTION 01 - PRODUCT AND COMPANY IDENTIFICATION

Product Identifier TETRACHLOROETHYLENE		Product Use Laboratory use	
Chemical formula CCl ₂ :CCl ₂		Product code TR-0113	Molar weight 165,83
Chemical name / Commercial name / Synonymous PERCHLOROÉTHYLÈNE, PCE, TÉTRACHLORURE D'ÉTHYLÈNE, TÉTRACHLOROÉTHÈNE, BICHLORURE DE CARBONE, ANKILOSTIN, DIDAKENE, NEMA, PERCLENÉ, TETRACAP			
Supplier's name Laboratoire MAT		Address-Street 610, Adanac Street	
City Québec		Province Québec	
Postal code G1C 7B7	Internet www.labmat.com	Phone number 418-660-8666 / 800-890-8666	
Emergency phone	CANUTEC: 613-996-6666		CENTRE ANTI-POISON DU QUÉBEC 800-463-5060
Date SDS 1/10/2020	SDS Prepared by Laboratoire MAT	E-Mail labmat@labmat.com	

SECTION 02 - HAZARDS IDENTIFICATION

Classification WHIMS / GHS	<p>Skin corrosion/irritation - Skin irritation category 2</p> <p>Carcinogenicity category 1B</p> <p>Specific Target Organ Toxicity - Repeated exposure category 2</p> <p>Respiratory or skin sensitization - Skin sensitize category 1</p> <p>Specific target organ toxicity - Single exposure category 3</p> <p>Serious eye damage/eye irritation - Eye irritation category 2</p>
Signal Word	<p>DANGER</p>
Hazards statements (H)	<p>H315 Causes skin irritation.</p> <p>H317 May cause an allergic skin reaction.</p> <p>H319 Causes serious eye irritation.</p> <p>H336 May cause drowsiness or dizziness.</p> <p>H350 May cause cancer.</p> <p>H373 May cause damage to organs through prolonged or repeated exposure.</p>
Precautionary statements (P)	<p>P201 Obtain special instructions before use.</p> <p>P202 Do not handle until all safety precautions have been read and understood.</p> <p>P260 Do not breathe dust / fume / gas / mist / vapours / spray.</p> <p>P261 Avoid breathing dust / fume / gas / mist / vapours / spray.</p> <p>P264 Wash the areas of the body that have been in contact with the product after handling.</p> <p>P271 Use only outdoors or in a well-ventilated area.</p> <p>P272 Contaminated work clothing should not be allowed out of the workplace.</p> <p>P280 Wear protective gloves/protective clothing/eye protection/face protection.</p> <p>P302 + P352 IF ON SKIN: Wash with plenty of soap and water.</p> <p>P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.</p> <p>P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</p> <p>P308 + P313 IF exposed or concerned: Get medical advice/attention.</p> <p>P312 Call a POISON CENTER or doctor/physician if you feel unwell.</p> <p>P314 Get medical advice/attention if you feel unwell.</p> <p>P321 Specific treatment (see section 4 of the SDS and on this label).</p> <p>P332 + P313 If skin irritation occurs: Get medical advice/attention.</p> <p>P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.</p> <p>P337 + P313 If eye irritation persists: Get medical advice/attention.</p> <p>P362 + P364 Take off contaminated clothing and wash it before reuse.</p> <p>P403 + P233 Store in a well-ventilated place. Keep container tightly closed.</p> <p>P405 Store locked up.</p> <p>P501 Dispose of contents/container in accordance with local / regional / national / international regulations or contact a specialist waste disposal company.</p>
PICTOGRAMS	
Other dangers	<p>NFPA (Risk: 0=No risk; 1=Slight; 2=Moderate; 3=Signifiant; 4=Extreme)</p>
	<p>Health 2</p> <p>Fire 0</p> <p>Reactivity 0</p> <p>Special danger</p>

SECTION 03 - COMPOSITION/INFORMATION ON INGREDIENTS

Ingrédients (Dénomination chimique / synonymes)	Numéro CAS et tout identificateur unique	Concentration (%)
Tétrachloroéthylène	127-18-4	<=100

SECTION 04 - FIRST AID MEASURES

Eye contact	Wash eyes with large amounts of water for at least 15 minutes while holding eyelids apart to rinse eyes. If irritation persists, seek medical attention.
Skin contact	Wash skin with plenty of water for at least 15 minutes. Remove soiled clothing. If irritation persists, seek medical attention.
Inhalation	Move the unwell person to the fresh air. If breathing is difficult, give oxygen. Consult a physician.
Ingestion	If the person is conscious, give water to drink. Never give anything by mouth to an unconscious person. Consult a physician.
Most important symptoms and effects (acute and delayed)	Ref. section 11.
Immediate medical attention and special treatment, if necessary	In case of medical consultation, keep this sheet available.
General advice	Show this safety data sheet to the doctor in attendance.

SECTION 05 - FIREFIGHTING MEASURES

Flammability	No
Ignition conditions	Not flammable or combustible.
Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Unsuitable extinguishing media	Data not available.
Hazardous combustion / decomposition products	Hazardous decomposition products formed under fire conditions. Phosgene (carbonyl dichloride) - Carbon oxides, Hydrogen chloride gas. Chlorine gas.
Special fire and explosion hazards	May react violently with incompatible products (Ref Section 10).
Special protective equipment and precautions for firefighters	Discard incompatible substances if this can be done without risk. Firefighters should be equipped with standard protective equipment, fireproof clothing, face mask, gloves, protective boots and, where appropriate, self-contained breathing apparatus.

SECTION 06 - ACCIDENTAL RELEASE MEASURES

Methods and materials for containment and cleaning up / Personnel precautions, protective equipment	Evacuate personnel to safe areas. Absorb the product with sand or vermiculite. Dilute residues with water, clean and rinse. Ensure a good ventilation of the premises. Dispose of residues in a container for disposal of hazardous materials. When handling, wear suitable safety equipment. Use breathing apparatus if necessary. Avoid breathing vapours, mist or gas. Do not let product enter drains.
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SECTION 07 - HANDLING AND STORAGE

Conditions for safe storage	Store in a cool, dry place. Keep container tightly closed and store away from heat, moisture, and incompatible products. Protect from light and sunlight. Keep container tightly closed in a dry and well-ventilated place. Light sensitive. Handle and store under inert gas.
Methods of handling	Bottle in the glass only. Always open containers slowly to allow any excess pressure to vent. Avoid inhalation of vapour or mist. Wear personal protective equipment when handling. Always ensure good ventilation. Transport according to TDG (ref Section 14)

SECTION 08 - EXPOSURE CONTROLS/PERSONAL PROTECTION

Workplace control parameters

Components	CAS-No.	Value	Control parameters	Basis
Tetrachloroethylene	127-18-4	STEL	100.000000 ppm 678.000000 mg/m3	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
		TWA	25.000000 ppm 170.000000 mg/m3	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
		TWA	25.000000 ppm	Canada. British Columbia OEL
Remarks	IARC '2A' applies to substances deemed probably carcinogenic to humans on the basis of limited evidence of carcinogenicity in humans. IARC '2A' applies to substances deemed probably carcinogenic to humans on the basis of limited evidence of carcinogenicity in humans.			
		TWAEV	25.000000 ppm 170.000000 mg/m3	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants
Carcinogenic effect detected in animals. Results of studies relating to the carcinogenicity of these substances in animals are not necessarily applicable to humans.				
		STEV	100.000000 ppm 685.000000 mg/m3	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants
Carcinogenic effect detected in animals. Results of studies relating to the carcinogenicity of these substances in animals are not necessarily applicable to humans.				
		STEL	100 ppm 678 mg/m3	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
		TWA	25 ppm 170 mg/m3	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
		TWA	25 ppm	Canada. British Columbia OEL
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Carcinogenic effect detected in animals. Results of studies relating to the carcinogenicity of these substances in animals are not necessarily applicable to humans.				
		TWA	25.000000 ppm	USA. ACGIH Threshold Limit Values (TLV)
		STEL	100.000000 ppm	USA. ACGIH Threshold Limit Values (TLV)
		TWA	25 ppm	USA. ACGIH Threshold Limit Values (TLV)
		STEL	100 ppm	USA. ACGIH Threshold Limit Values (TLV)

Data source	Sigma-Aldrich (Millipore Sigma)
Ventilation	Fan.
Respiratory	If work under the hood is not possible, or if the permissible levels are exceeded, use a mechanical filter / cartridge against NIOSH vapors or a respirator with air supply.
Gloves	Handle with gloves.
Eyes	Safety goggles with safety shutters.
Shoes	Safety shoes.
Clothing	Labcoat. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Engineering control	Have safety showers and eyewash stations in the workplace in case of an emergency and a ventilation

SECTION 09 - PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Liquid.
Appearance	Liquide incolore.
Odour	Caractéristique, doux.
Odour threshold	Data not available
pH	Donnée non-disponible.
Melting point / Freezing point	-22.4°C
Initial boiling point	121°C
Boiling range	Data not available
Flash point	Data not available
Evaporation rate	8.1%
Flammability	No
Lower flammable / Explosive limit	Data not available
Upper flammable / Explosive limit	Data not available
Vapour pressure	18 mbar à 20°C.
Vapour density	Data not available
Relative density	1.62g/cm ³
Solubility	Insoluble dans l'eau. Miscible avec l'alcool, le benzène, le chloroforme et l'éther.
Partition coefficient water/n-octanol	0.0013-
Auto-ignition temperature	650°C
Decomposition temperature	>150°C
Viscosity	0.442 - 1.114mPa.s

SECTION 10 - STABILITY AND REACTIVITY

Reactivity	Non-reactive under normal conditions.
Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	Stable under normal conditions.
Conditions of instability (Including sensitivity to shock / static discharge / vibration)	Avoid excessive heat. Exposure to moist air or water. Light sensitive.
Incompatible material	Strong oxidizing agents (nitric acid, perchloric acid, peroxides, chlorates and perchlorates), strong bases, sodium hydroxide, chemically active metals such as barium, beryllium, lithium, sodium and potassium.
Hazardous decomposition products	Toxic vapors of hydrogen chloride, carbon monoxide, dioxide and carbon oxychloride (phosgene). Hazardous decomposition products formed under fire conditions. Gaseous chlorine.

SECTION 11 - TOXICOLOGICAL INFORMATION

TETRACHLOROETHYLENE

Routes of exposure	Ingestion, inhalation, skin and eyes.
Acute exposition effects / symptoms:	By exposure route below.
- Eyes	Irritation and may cause inflammation of the conjunctiva.
- Skin	Irritation and dermatitis.
- Inhalation	Irritation of the mucous membranes and respiratory tract. Narcotic effects, liver and lung damage, chest pain, cough, dyspnea, headache, dizziness, drowsiness, convulsions, cardiac arrhythmia, respiratory paralysis, loss of consciousness, coma and may cause death.
Acute toxicity (Ingestion)	Irritation of the mucous membranes. Narcotic effects, liver and kidney damage, gastrointestinal disorders, cramps, diarrhea, headache, dizziness, drowsiness, incoordination, nausea and vomiting, seizures, cardiac arrhythmia, loss of consciousness, coma and may result in death.
Chronic exposure effects / symptoms	Burning sensation, dermatitis, conjunctivitis, narcotic effects, liver and kidney damage, chest pain, cough, dyspnea, laryngitis, headache, dizziness, drowsiness, erythema, cardiac arrhythmia, muscle weakness, weight loss and loss appetite, nausea and vomiting. Prolonged exposure to this product is likely to cause cancer. Is recognized as probably carcinogenic agent for humans (class 2A IARC) - Group 2A.
DL50 (specify species and route of entry)	LD50 Oral - Rat - female - 3,005 mg/kg. LD50 Dermal - Rabbit - > 5000 mg / kg
CL50 (specify species and route of entry)	LC50 Inhalation - Rat - 4h - 4000 ppm.

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity	Toxicity to fish: Flow-through test - LC50 - <i>Oncorhynchus mykiss</i> (rainbow trout) - 5 mg/L - 96 h. Toxicity to daphnia and other aquatic invertebrates: EC50 - <i>Daphnia magna</i> (Water flea) - 7.50 mg/L - 48h. Toxicity to algae: Static test EC50 - <i>Skeletonema costatum</i> - > 16 mg/l - 7 h.
Persistence and degradability	Biodegradability aerobic. Result: 11 % - Not readily biodegradable. Method: OECD Test Guideline 301C.
Bioaccumulative potential	Bioaccumulation <i>Lepomis macrochirus</i> (Bluegill) - 21 d. - 0.00343 mg/l. Bioconcentration factor (BCF): 49.
Mobility in soil	Is not likely mobile in soil due its low water solubility.
Other adverse effects	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Toxic to aquatic life with long lasting effects.

SECTION 13 - DISPOSAL CONSIDERATIONS

Waste Disposal Method	Dispose of contents / container in accordance with local / regional / national / international regulations / or contact a specialist waste disposal company.
Contaminated Packaging	Dispose of as unused product.

SECTION 14 - TRANSPORT INFORMATION

UN Number	1897
UN Proper shipping name	TÉTRACHLORÉTHYLÈNE
Transport hazard class(es)	6.1 Toxic substances
Packing group	III
Limited quantity index	5L
ERAP Index	-
Special precautions	-

SECTION 15 - REGULATORY INFORMATION

WHIMS CANADA	Skin corrosion/irritation - Skin irritation category 2 Carcinogenicity category 1B Specific Target Organ Toxicity - Repeated exposure category 2 Respiratory or skin sensitization - Skin sensitize category 1 Specific target organ toxicity - Single exposure category 3 Serious eye damage/eye irritation - Eye irritation category 2
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SECTION 16 - OTHER INFORMATION

Further information

The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. It does not represent any guarantee of the properties of the product. Laboratoire MAT Inc. shall not be held liable for any damage resulting from handling or from contact with the above product.

Last Update: 1/10/2020