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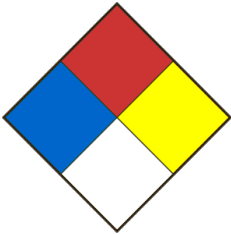
SAFETY DATA SHEET

SECTION 01 - PRODUCT AND COMPANY IDENTIFICATION

Product Identifier TRIMÉTHYLCHLOROSILANE		Product Use Laboratory use	
Chemical formula (CH ₃) ₃ SiCl		Product code CP-0336	Molar weight 108,64
Chemical name / Commercial name / Synonymous TMCS, TRIMETHYLCHLOROSILANE, TRIMETHYLSILYL CHLORIDE,			
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 9/25/2019	SDS Prepared by Laboratoire MAT	E-Mail labmat@labmat.com	

SECTION 02 - HAZARDS IDENTIFICATION

Classification WHIMS / GHS	<p>Flammable liquids category 2</p> <p>Skin corrosion/irritation - Skin corrosion category 1A</p> <p>Serious eye damage/eye irritation - Serious eye damage category 1</p> <p>Acute toxicity - Oral category 3</p> <p>Acute toxicity - Dermal category 4</p> <p>Acute toxicity - Inhalation category 3</p> <p>Specific target organ toxicity - Single exposure category 3</p>
Signal Word	<p>DANGER</p>
Hazards statements (H)	<p>H225 Highly flammable liquid and vapour.</p> <p>H301 Toxic if swallowed.</p> <p>H312 Harmful in contact with skin.</p> <p>H314 Causes severe skin burns and eye damage.</p> <p>H318 Causes serious eye damage.</p> <p>H331 Toxic if inhaled.</p> <p>H335 May cause respiratory irritation.</p>
Precautionary statements (P)	<p>P210 Keep away from heat/sparks/open flames/hot surfaces. — No smoking.</p> <p>P233 Keep container tightly closed.</p> <p>P240 Ground/bond container and receiving equipment.</p> <p>P241 Use explosion-proof electrical/ventilating/lighting equipment.</p> <p>P242 Use only non-sparking tools.</p> <p>P243 Take precautionary measures against static discharge.</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>P270 Do not eat, drink or smoke when using this product.</p> <p>P271 Use only outdoors or in a well-ventilated area.</p> <p>P280 Wear protective gloves/protective clothing/eye protection/face protection.</p> <p>P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.</p> <p>P301 + P330 + P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.</p> <p>P302 + P352 IF ON SKIN: Wash with plenty of soap and water.</p> <p>P303 + P361 + P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.</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>P310 Immediately call a POISON CENTER or doctor/physician.</p> <p>P311 Call a POISON CENTER or doctor/physician.</p> <p>P312 Call a POISON CENTER or doctor/physician if you feel unwell.</p> <p>P321 Specific treatment (see section 4 of the SDS and on this label).</p> <p>P330 Rinse mouth.</p> <p>P362 + P364 Take off contaminated clothing and wash it before reuse.</p> <p>P363 Wash contaminated clothing before reuse.</p> <p>P370 + P378 In case of fire: Use dry powder or dry sand for extinction.</p> <p>P403 + P233 Store in a well-ventilated place. Keep container tightly closed.</p> <p>P403 + P235 Store in a well-ventilated place. Keep cool.</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	NFPA (Risk: 0=No risk; 1=Slight; 2=Moderate; 3=Signifiant; 4=Extreme)
	Health 2 Fire 4 Reactivity 0 Special danger

SECTION 03 - COMPOSITION/INFORMATION ON INGREDIENTS

Ingrédients (Dénomination chimique / synonymes)	Numéro CAS et tout identificateur unique	Concentration (%)
Chlorotriméthylsilane	75-77-4	<=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	Do NOT induce vomiting. If the person is conscious, rinse the mouth with water. 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	Yes
Ignition conditions	This product is flammable under the following conditions: May ignite if exposed to an ignition source.
Suitable extinguishing media	Dry powder or dry sand.
Unsuitable extinguishing media	Do not use a jet of water.
Hazardous combustion / decomposition products	Hazardous decomposition products formed under fire conditions. Carbon oxides. Hydrogen chloride gas. - silicon oxides.
Special fire and explosion hazards	May react violently with incompatible products (Ref Section 10). The return flame distance can be considerable. Containers exposed to fire may explode. The product hydrolysed by water releases an acid gas which, in contact with a metal surface, may produce flammable and / or explosive hydrogen gas. Vapors may form explosive mixtures with air. Vapors may rise to the source of ignition and flash back.
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. Ensure adequate ventilation. Remove all sources of ignition. Use anti-spark tools and anti-explosion equipment. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. Do not let product enter drains. Discharge into the environment must be avoided.
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SECTION 07 - HANDLING AND STORAGE

Conditions for safe storage	Keep container tightly closed in a dry and well-ventilated place. Close all opened containers carefully and store vertically to avoid any flow. Never allow product to get in contact with water during storage. Keep away from heat and sources of ignition.
Methods of handling	Avoid contact with the skin, eyes and clothes. Avoid inhalation of vapour or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge. Use a hood preferably.

SECTION 08 - EXPOSURE CONTROLS/PERSONAL PROTECTION

Workplace control parameters

Components	CAS-No.	Control	Value	Basis
CHLOROTRIMÉTHYLSILANE	75-77-4	TLV, TWA, STEL	No data available	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
		TLV, TWA, STEL	No data available	Canada. British Columbia OEL
		TLV, TWA, STEL	No data available	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants

Ventilation	Use fan.
Respiratory	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 system to maintain the level of concentrations in the air below the exposure limit values.

SECTION 09 - PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Liquid.
Appearance	Incolore.
Odour	Caractéristique.
Odour threshold	Data not available
pH	Donnée non disponible..
Melting point / Freezing point	-40°C
Initial boiling point	57°C
Boiling range	Data not available
Flash point	-28°C
Evaporation rate	Data not available
Flammability	Yes
Lower flammable / Explosive limit	1.5%
Upper flammable / Explosive limit	46%
Vapour pressure	234 mm Hg at 25 deg C.
Vapour density	3.75 (Air = 1.0)-
Relative density	0.856g/cm ³
Solubility	Réagit avec l'eau. Soluble dans le benzène, l'ether et le perchloroethylene..
Partition coefficient water/n-octanol	log Pow : 1.19-
Auto-ignition temperature	407°C
Decomposition temperature	Data not available
Viscosity	0.34 mPa.s @ 25 °C.

SECTION 10 - STABILITY AND REACTIVITY

Reactivity	Non-reactive under normal conditions. Material may react violently with water.
Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	Stable under normal conditions. Vapours may form explosive mixture with air. Reacts violently with water.
Conditions of instability (Including sensitivity to shock / static discharge / vibration)	Heat, flames and sparks. Exposure to moisture. Avoid excessive heat.
Incompatible material	Water It hydrolyzes in the presence of water producing hydrochloric acid (HCl). Strong oxidizing agents, strong acids. When in contact with acids or acidic vapors, it emits toxic chlorinated fumes. Strong bases. Alcohol Amines. Aldehydes. alkalis.
Hazardous decomposition products	Hazardous decomposition products formed under fire conditions. - Carbon oxides, silicon oxides. Hydrogen chloride gas.

SECTION 11 - TOXICOLOGICAL INFORMATION

TRIMÉTHYLCHLOROSILANE

Routes of exposure	Ingestion, inhalation, skin and eyes.
Acute exposition effects / symptoms:	By exposure route below.
- Eyes	Irritation and burning of the eye tissue that may result in partial or complete loss of vision.
- Skin	Severe irritation and tissue burns.
- Inhalation	Causes burns of the respiratory tract.
Acute toxicity (Ingestion)	Burns of the esophagus, stomach and gastrointestinal tract.
Chronic exposure effects / symptoms	The product is extremely destructive of tissues of mucous membranes, respiratory tract upper, eyes and skin., spasm, inflammation and edema of the larynx, spasm, inflammation and bronchial edema, pulmonary congestion, pulmonary edema, Aldrich - 92361 Page 9 of 10 The life science business of Merck KGaA, Darmstadt, Germany operates as MilliporeSigma in the US and Canada burning sensation, cough, asthma, laryngitis, respiratory failure, headache, Nausea, Vomiting
DL50 (specify species and route of entry)	LD50 Oral - Rat - Male. <212 mg/kg. LD50 Dermal - Rabbit - Male et female - 1513 mg/kg.
CL50 (specify species and route of entry)	CL50 inhalation - Rat Male et female - 4257 ppm - 1 h.

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity	LC50 - Oncorhynchus mykiss (rainbow trout) - Semi-static test: 271 mg/L - 96 h. EC50 - Daphnia magna (Water flea) - Semi-static test: 124 mg/L - 48 h. EC50 - Pseudokirchneriella subcapitata (green algae) - Static test: 566 mg/L - 72 h. CE50- activated sludge 6670 mg/L.
Persistence and degradability	Aerobic Biodegradability - Duration of exposure 28 d Result: 0% - Not readily biodegradable. (OECD guideline 310).
Bioaccumulative potential	Data not available.
Mobility in soil	Data not available.
Other adverse effects	Data not available.

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	1298
UN Proper shipping name	TRIMÉTHYLCHLOROSILANE
Transport hazard class(es)	3 Flammable liquids 8 Corrosive substances
Packing group	II
Limited quantity index	OL
ERAP Index	1000
Special precautions	-

SECTION 15 - REGULATORY INFORMATION

WHIMS CANADA	Flammable liquids category 2 Skin corrosion/irritation - Skin corrosion category 1A Serious eye damage/eye irritation - Serious eye damage category 1 Acute toxicity - Oral category 3 Acute toxicity - Dermal category 4 Acute toxicity - Inhalation category 3 Specific target organ toxicity - Single exposure category 3
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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.

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