

Centre Anti-Poison pour le Québec: (800) 463-5060 Tél. (Qc): (418) 660-8666 / 800-890-8666 Fax. (Qc): (418) 660-8998

SAFETY DATA SHEET

SECTION 01 - PRODUCT AND COMPANY IDENTIFICATION

Product Identifier			Product Use		
2,2,4-TRIMETHYLPENTANE				Laboratory use	
Chemical formula				Product code	Molar weight
C8H18				TR-0186; TH-0104	114,23
Chemical name / Commerc 2,2,4-TRIMÉTHYLPE	ial name / Synonymous ENTANE, ISOBUTYLTRIMÉT	HYLMÉTHANE, ISO	OCTANE		
Supplier's name			Address-Street		
Laboratoire MAT		610, Adanac Street			
City		Province			
Québec		Québec			
Postal code	Internet	Internet		Phone number	
G1C 787	www.labmat.co	www.labmat.com		418-660-8666 / 800-890-8666	
Emergency phone	CANUTEC: 6	CANUTEC: 613-996-6666		CENTRE ANTI-POISON DU QUÉBEC 800-463-5060	
Date SDS SDS Prepared by		•	E-Mail		

SECTION 02 - HAZARDS IDENTIFICATION

Classification WHIMS / GHS	Floren de la literatule	
	Flammable liquids	
	Skin corrosion/irr	itation - Skin irritation category 2
	Specific target or	gan toxicity - Single exposure category 3
	Aspiration hazard	category 1
Signal Word	DANGER	
Hazards statements (H)	H225 Highly flam	mable liquid and vapour.
	H304 May be fa	tal if swallowed and enters airways.
	H315 Causes skin	irritation.
	H336 May cause	drowsiness or dizziness.
Precautionary statements (P)	P210	Keep away from heat/sparks/open flames/hot surfaces. — No smoking.
	P233	Keep container tightly closed.
	P240	Ground/bond container and receiving equipment.
	P241	Use explosion-proof electrical/ventilating/lighting equipment.
	P242	Use only non-sparking tools.
	P243	Take precautionary measures against static discharge.
	P261	Avoid breathing dust / fume / gas / mist / vapours / spray.
	P264	Wash the areas of the body that have been in contact with the product after handling.
	P271	Use only outdoors or in a well-ventilated area.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
	P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
	P303 + P361 + F	2353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
	P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
	P312	Call a POISON CENTER or doctor/physician if you feel unwell.
	P321	Specific treatment (see section 4 of the SDS and on this label).
	P331	Do NOT induce vomiting.
	P332 + P313	If skin irritation occurs: Get medical advice/attention.
	P362 + P364	Take off contaminated clothing and wash it before reuse.
	P370 + P378	In case of fire: Use water spray or alcohol-resistant foam, or dry powder or carbon dioxide for extinction.
	P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
	P403 + P235	Store in a well-ventilated place. Keep cool.
	P405	Store locked up.
	P501	Dispose of contents/container in accordance with local / regional / national / international regulations or contact a specialist waste disposal company.
PICTOGRAMS		
Other dangers	1	<pre>\FPA (Risk: 0=No risk; 1=Slight; 2=Moderate; 3=Signifiant; 4=Extreme)</pre>
	Health 3	
	Fire 3	
	Reactivity 1	
	Special danger	
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SECTION 03 - COMPOSITION/INFORMATION ON INGREDIENTS

Ingrédients (Dénomination chimique / synonymes)	Numéro CAS et tout identificateur unique	Concentration (%)
2,2,4-Triméthylpentane	540-84-1	<=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 1.5 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	Heat, sparks and open flame.
Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Unsuitable extinguishing media	Do not use a heavy water stream.
Hazardous combustion / decomposition products	Hazardous decomposition products formed under fire conditions. Carbon oxides.
Special fire and explosion hazards	May react violently with incompatible products (Ref Section 10). Containers exposed to fire may explode. The return flame distance can be considerable. Vapors may form explosive mixtures with air. Vapors may rise to the source of ignition and flash back. Do not allow run-off from fire fighting to enter drains or water courses.
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

	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
Personnal precautions, protective	of hazardous materials. When handling, wear suitable safety equipment. Use breathing apparatus if
equipment	necessary. Avoid breathing vapours, mist or gas. Cut off all sources of ignition. Vapours can accumulate
	in low areas. Beware of vapours accumulating to form explosive concentrations. Do not let product enter
	drains.

SECTION 07 - HANDLING AND STORAGE

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Keep container tightly closed and store away from oxidizing agents, heat, moisture and incompatible products.
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. Do not use tools that produce sparks. Avoid ingestion and inhalation. 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
2,2,4- Trimethylpentane	540-84-1	TWA	300.000000 ppm 1,401.000000 mg/m3	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
		TWA	300.000000 ppm	Canada. British Columbia OEL
		TWA	300 ppm	Canada. British Columbia OEL
		TWA	300.000000 ppm	USA. ACGIH Threshold Limit Values (TLV)

Data source	Sigma-Aldrich.
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	Use 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	Distillats de pétrole.
Odour threshold	Data not available
рН	Donnée non disponible
Melting point / Freezing point	-107°C
Initial boiling point	98-99°C
Boiling range	Data not available
Flash point	-12°C
Evaporation rate	Data not available
Flammability	Yes
Lower flammable / Explosive limit	1%
Upper flammable / Explosive limit	6%
Vapour pressure	88.0 mm @ 37.8°C.
Vapour density	3.94 (Air = 1.0).
Relative density	0.692g/cm ³
Solubility	Insoluble dans l'eau. Peu soluble dans l'alcool.
Partition coefficient water/n-octanol	log Pow : 4.6.
Auto-ignition temperature	410°C
Decomposition temperature	Data not available
Viscosity	0.51 mPa à 22°C.

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. Vapours may form explosive mixture with air.
Conditions of instability (Including sensitivity to shock / static discharge / vibration)	Avoid excessive heat. Heat, flames and sparks. Exposure to light. Avoid the accumulation of static electricity.
Incompatible material	Strong oxidizing agents, strong acids. Strong bases.
Hazardous decomposition products	Hazardous decomposition products formed under fire conditions. Carbon oxides.

SECTION 11 - TOXICOLOGICAL INFORMATION

2,2,4-TRIMETHYLPENTANE

Routes of exposure	Ingestion, inhalation, skin and eyes.
Acute exposition effects / symptoms:	By exposure route below.
- Eyes	Severe irritation that may cause eye damage.
- Skin	Irritation and dermatitis.
- Inhalation	Irritation of the mucous membranes and respiratory tract. May be harmful if inhaled. Nervous disorders, narcosis, pains in the chest, dizziness, drowsiness, headache, cough, dyspnoea, nausea and vomiting, seizures, coma and death.
Acute toxicity (Ingestion)	Irritation of the mucous membranes. Nervous disorders, gastrointestinal disorders, narcosis, headache, vertigo, drowsiness, nausea and vomiting, convulsions, coma and death.
Chronic exposure effects / symptoms	May cause drowsiness or dizziness. The substance or mixture is known to cause a risk of aspirational toxicity in humans or should be considered as if it presented a risk of aspirational toxicity in humans. Burning sensation, dermatitis, conjunctivitis, chest pain, nervous disorders, narcosis, dizziness, dizziness, headache, cough, dyspnoea, laryngitis, loss of appetite, convulsions, nausea and vomiting.
DL50 (specify species and route of entry)	LD50 Oral - Rat - 5000 mg/kg. LD50 Dermal - Rabbit - 2000 mg/kg
CL50 (specify species and route of entry)	CL50 inhalation - Rat 33.52 mg/L - 4 h

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity	LC50 - Oncorhynchus mykiss (rainbow trout) - 0.11 mg/L - 96 h EC50 - Daphnia magna (Water flea) - 0.4 mg/L - 48 h EC50 for freshwater algae - 2.94 mg/L - 72 h
Persistence and degradability	Insoluble in water. Persistence is unlikely.
Bioaccumulative potential	Data not available.
Mobility in soil	Data not available.
	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

	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	1262
UN Proper shipping name	OCTANES
Transport hazard class(es)	3 Flammable liquids
Packing group	ll l
Limited quantity index	1L
ERAP Index	-
Special precautions	-

SECTION 15 - REGULATORY INFORMATION

Aspiration hazard category 1		Flammable liquids category 2 Skin corrosion/irritation - Skin irritation category 2 Specific target organ toxicity - Single exposure category 3 Aspiration hazard category 1
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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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