



SAFETY DATA SHEET

SECTION 01 - IDENTIFICATION

Product Identifier	TRIS(HYDROXYMETHYLE) AMINOMETHANE
Other identification (Chemical name, Commercial name, Synonymous)	TRIS(HYDROXYMETHYL)AMINOMETHANE; TROMETHAMINE; 2-AMINO-2-HYDROXYMETHYL-1,3-PROPANEDIOL; TRIMETHYLOL AMINOMETHANE; TRISAMINE; TROMETAMOL; TROMETHANE; TRIS; THAM
Product code	TR-0197; TR-0193; TU-0197
Chemical formula	$(\text{HOCH}_2)_3\text{CNH}_2$
Molar weight	121.14
Recommended use and Restrictions on use	For laboratory, school, commercial or industrial use. Not for medical or household use. Do not use for medical, food or household purposes.
Supplier	LABORATOIRE MAT 610, rue Adanac Québec Québec G1C 7B7 418-660-8666 Mon-Fri 8h-16h www.labmat.com labmat@labmat.com
Emergency phone	418-660-8666 Mon-Fri 8h-16h CENTRE ANTI-POISON DU QUÉBEC 800-463-5060
Date SDS	2025-05-06

SECTION 02 - HAZARDS IDENTIFICATION

WHIMS CANADA	- Not a hazardous substance according to WHMIS
Hazards statements (H)	- Not a dangerous substance or mixture according to the Canada WHMIS
Precautionary statements (P)	- The use of this product does not present any particular risk. However, standard laboratory safety precautions such as wearing gloves, clothing and eye protection should be followed.
Other dangers	NFPA (Risk: 0=No risk; 1=Slight; 2=Moderate; 3=Signifiant; 4=Extreme) Health 1 Fire 0 Reactivity 0 Special danger

SECTION 03 - COMPOSITION/INFORMATION ON INGREDIENTS

Component	No. CAS	% Weight
Tris (hydroxymethyl) aminomethane	77-86-1	<=100%

SECTION 04 - FIRST AID MEASURE

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 contaminated 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)	Main symptoms of high exposure: Skin, eye and respiratory system irritation. Nausea and vomiting. By ingestion: Diarrhea. Headaches. Gastrointestinal disorders. Dizziness. Convulsions. Ref. section 11.
Immediate medical attention and special treatment, if necessary	Treat according to symptoms. Show this sheet to the attending physician.

SECTION 05 - FIREFIGHTING MEASURES

Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Unsuitable extinguishing media	Data not available.
Combustion products	Hazardous combustion products formed under fire conditions: Carbon oxides. Nitrogen oxides (NOx).
Specific hazards of the dangerous product	To our knowledge, the product has not been fully evaluated. 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

Personal precautions, protective equipment and emergency measures	Evacuate personnel to safe areas. When handling, wear appropriate safety equipment (reference Section 8 for protective equipment to be used). Ensure a good ventilation. Use NIOSH cartridge respiratory protection for larger spills. Cut off all sources of ignition. Avoid dust formation. Avoid breathing dust.
Methods and materials for containment and cleaning up	Pick up with a shovel or broom, taking care not to scatter dust. Dispose of residues in a container for disposal of hazardous materials. When handling, wear suitable safety equipment. Discharge into the environment must be avoided.

SECTION 07 - HANDLING AND STORAGE

Conditions for safe storage	Store in a cool and dry place. Keep container tightly closed and store away from heat, water, moisture, and incompatible products (ref. section 10). Hygroscopique
Methods of handling	Avoid contact with eyes, skin and clothing. Avoid ingestion and inhalation. Wear personal protective equipment (ref. section 8) when handling. Always ensure good ventilation. Apply the usual standard hygiene rules: Wash your hands after use. Do not eat or drink during use.

SECTION 08 - EXPOSURE CONTROLS/PERSONAL PROTECTION

WORKPLACE CONTROL PARAMETERS

Component	CAS-No.	Value
TRIS(HYDROXYMETHYL)AMINOMETHANE	77-86-1	No occupational exposure limits established by region-specific regulators - Quebec, Alberta, Ontario, British Columbia.

Respiratory	If permitted levels are exceeded, use NIOSH cartridge respiratory protection, or an air-supplied respirator.
Gloves	Handle with protective gloves. Suggested material: Nitrile. Butyl. Neoprene. The type, thickness and length of the glove must be chosen according to the use, the concentration of the product, as well as the duration of use. Replace gloves regularly for better protection.
Eyes	Safety goggles with safety shutters.
Shoes	Use safety shoes.
Clothes	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	Use fan. 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	Solid.
Color	White.
Odour	slight, characteristic.
Odour threshold	Data not available.
Melting point and freezing point	169°C.
Boiling point	219-220 °C at 10 mm Hg.
Flammability	No.
Lower flammable / Explosive limit	Data not available.
Upper flammable / Explosive limit	Data not available.
Flash point	Data not available.
Auto-ignition temperature	Data not available.
Decomposition temperature	143 °C (289 °F).
pH	10.4 (0.1M) Aqueous solution.
Kinematic viscosity	Data not available.
Solubility	Highly soluble in water. Soluble in alcohol and ethylene glycol.
Partition coefficient water/n-octanol	Data not available.
Vapour pressure	0 Pa @ 20 °C.
Relative density	1.32g/ml.
Vapour density	Data not available.
Particle characteristics	Crystalline powder.

SECTION 10 - STABILITY AND REACTIVITY

Reactivity	May react violently with incompatible substances. Fine dusts of organic materials have the potential to form a combustible or explosive mixture with air if confined in a small space and subjected to an ignition source.
Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	May form combustible dust concentrations in the air.
Conditions to avoid	Avoid moisture. Avoid contact with incompatible materials and extreme temperatures. Avoid dust formation.
Incompatible materials	Strong acids. Strong bases.
Hazardous decomposition products	Nitrogen oxides (NOx). Carbon monoxide (CO), Carbon dioxide (CO2).

SECTION 11 - TOXICOLOGICAL INFORMATION

TRIS(HYDROXYMETHYLE) AMINOMETHANE

Routes of exposure	Ingestion, inhalation, skin and eye contact.
Acute exposition effects / symptoms:	By exposure route below.
- Eyes	Irritation.
- Skin	Irritation
- Inhalation	May irritate the respiratory system. Nervous disorders. Cough. Dyspnoea. Headaches. Dizziness. Nausea and vomiting.
Acute toxicity (Ingestion)	Gastrointestinal disorders. Cramps. Diarrhea. Headaches. Dizziness. Convulsions. Nausea and vomiting.
Chronic exposure effects / symptoms	Burning sensation. Nervous disorders. Chest pain. Cough. Dyspnoea. Headache. Dizziness. Fatigue. Nausea and vomiting.
DL50 (specify species and route of entry)	LD50 Oral - Rat - > 3000 mg/kg . LD50 Dermal - Rat - >5000mg/kg.
CL50 (specify species and route of entry)	LC50 Inhalation - Data not available.

SECTION 12 - ECOLOGICAL INFORMATION

TRIS(HYDROXYMETHYLE) AMINOMETHANE

Ecotoxicity	Toxicity to daphnia and other aquatic invertebrates: Static test EC50 - Daphnia magna (Water flea): > 980mg/l - 48h. Toxicity to bacteria: Static test EC50 - > 1,000mg/l - 3h
Persistence and degradability	Biodegradability aerobic - Duration of exposure 28 days - Result: 97.1% - Readily biodegradable.
Bioaccumulative potential	Accumulation is not expected.
Mobility in soil	Data not available.
Other adverse effects	Avoid release to the environment.

SECTION 13 - DISPOSAL CONSIDERATIONS

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

SECTION 14 - TRANSPORT INFORMATION

UN Number N/R

UN Proper shipping name

Transport hazard class(es)

Packing group

Limited quantity index

ERAP Index

Special precautions

SECTION 15 - REGULATORY INFORMATION

WHIMS CANADA - Not a hazardous substance according to WHMIS

SECTION 16 - OTHER INFORMATION

CNESST: Commission des normes, de l'équité et de la santé et sécurité au travail

NIH: National institute of health (U.S. National Library of Medicine)

ECHA: Agence Européenne de Chimie

ACGIH : American Conference of Governmental Industrial Hygienists

AIHA : American Industrial Hygiene Association

VECD: Valeur d'exposition courte durée

VEMP: Valeur d'exposition moyenne pondérée

CMRG : Chemical Manufacturer's Recommended Guidelines

OSHA : United States Department of Labor - Occupational Safety and Health Administration

TLV : Threshold limit value

TWA: Time-Weighted-Average

STEL: Short Term Exposure Limit

CEIL: Ceiling

RSST: Règlement sur la santé et sécurité au travail (Québec)

INRS: l'Institut national de recherche et de sécurité pour la prévention des accidents du travail et des maladies professionnelles (France)

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: 2025-05-06