



## SAFETY DATA SHEET

### SECTION 01 - IDENTIFICATION

<b>Product Identifier</b>	2,3,5-TRIPHENYL-2H-TETRAZOLIUM CHLORIDE
<b>Other identification (Chemical name, Commercial name, Synonymous)</b>	2,3,5-TRIPHENYL-2H-TETRAZOLIUM CHLORIDE; 2,3,5-TRIPHENYLTETRAZOLIUM CHLORIDE; 2H-TETRAZOLIUM, 2,3,5-TRIPHENYL-, CHLORIDE; Chlorure de triphényl-2,3,5 tétrazolium; TRIPHENYLTETRAZOLIUM CHLORIDE
<b>Product code</b>	TP-0870
<b>Chemical formula</b>	$C_{19}H_{15}ClN_4$
<b>Molar weight</b>	334.81
<b>Recommended use and Restrictions on use</b>	For laboratory, school, commercial or industrial use. Not for medical or household use. Do not use for medical, food or household purposes.
<b>Supplier</b>	LABORATOIRE MAT 610, rue Adanac Québec Québec G1C 7B7 418-660-8666 Mon-Fri 8h-16h www.labmat.com labmat@labmat.com
<b>Emergency phone</b>	418-660-8666 Mon-Fri 8h-16h CENTRE ANTI-POISON DU QUÉBEC 800-463-5060
<b>Date SDS</b>	2025-03-31

## SECTION 02 - HAZARDS IDENTIFICATION

### WHIMS CANADA

- Flammable liquids - category 1
- Skin corrosion/irritation - Skin irritation - category 2
- Serious eye damage/eye irritation - Eye irritation - category 2A
- Specific target organ toxicity - Single exposure - category 3

### PICTOGRAMS



### Signal Word

DANGER

### Hazards statements (H)

- Extremely flammable liquid and vapour
- Causes skin irritation
- Causes serious eye irritation
- May cause respiratory irritation

### Precautionary statements (P)

- Keep away from heat, sparks, open flames, hot surfaces. — No smoking.
- Keep container tightly closed.
- Ground and bond container and receiving equipment.
- Use explosion-proof equipment.
- Use only non-sparking tools.
- Take precautionary measures against static discharge.
- Wear protective gloves (nitrile, butyle, neoprene), protective clothing and eye and face protection.
- IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse with water.
- In case of fire: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide to extinguish.
- Store in a well-ventilated place. Keep cool.
- Dispose of contents and container in accordance with local, regional and national regulations, or contact a specialist waste disposal company.
- IF ON SKIN: Wash with plenty of water
- If skin irritation occurs: Get medical attention.
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- If eye irritation persists get medical attention.
- Avoid breathing mists, gases, vapors and other fumes, or the product itself.
- Use only outdoors or in a well-ventilated area.
- IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
- Call a POISON CENTER or a doctor or if you feel unwell.
- Store in a well ventilated place. Keep container tightly closed.
- Store locked up.

### Other dangers

NFPA (Risk: 0=No risk; 1=Slight; 2=Moderate; 3=Significant; 4=Extreme)

**Health** 1  
**Fire** 3  
**Reactivity** 0  
**Special danger**

## SECTION 03 - COMPOSITION/INFORMATION ON INGREDIENTS

Component	No. CAS	% Weight
2,3,5-TRIPHENYL-2H-TETRAZOLIUM CHLORIDE	298-96-4	<=100%

## SECTION 04 - FIRST AID MEASURE

<b>Eye contact</b>	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.
<b>Skin contact</b>	Wash skin with plenty of water for at least 15 minutes. Remove contaminated clothing. If irritation persists, seek medical attention.
<b>Inhalation</b>	Move the unwell person to the fresh air. If breathing is difficult, give oxygen. Consult a physician.
<b>Ingestion</b>	If the person is conscious, give water to drink. Never give anything by mouth to an unconscious person. Consult a physician.
<b>Most important symptoms and effects (acute and delayed)</b>	Skin, eye and respiratory system irritation. Ref. section 11. Main symptoms of high exposure:
<b>Immediate medical attention and special treatment, if necessary</b>	Treat according to symptoms. Show this sheet to the attending physician.

## SECTION 05 - FIREFIGHTING MEASURES

<b>Suitable extinguishing media</b>	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
<b>Unsuitable extinguishing media</b>	Data not available.
<b>Combustion products</b>	Carbon oxides. Gaseous Hydrogen Chloride. Nitrogen oxides (NOx). Hazardous combustion products formed under fire conditions:
<b>Specific hazards of the dangerous product</b>	May form combustible dust concentrations in the air. May react violently with incompatible products (Ref Section 10).
<b>Special protective equipment and precautions for firefighters</b>	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

<b>Personal precautions, protective equipment and emergency measures</b>	Cut off all sources of ignition. 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. Avoid dust formation. Avoid breathing dust.
<b>Methods and materials for containment and cleaning up</b>	Discharge into the environment must be avoided. 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. Dilute residues with water, clean and rinse.

## SECTION 07 - HANDLING AND STORAGE

<b>Conditions for safe storage</b>	Protect from light and sunlight. Keep away from heat and sources of ignition. Store in a cool and dry place. Keep container tightly closed and store away from heat, water, moisture, and incompatible products (ref. section 10).
<b>Methods of handling</b>	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

Components	CAS-No.	Control parameters
2,3,5-TRIPHENYL-2H-TETRAZOLIUM CHLORIDE		No occupational exposure limits established by region-specific regulators - Quebec, Alberta, Ontario, British Columbia.

<b>Respiratory</b>	If work under the hood is not possible, or if the permissible levels are exceeded, use NIOSH cartridge respiratory protection, or an air-supplied respirator. If permitted levels are exceeded, use NIOSH cartridge respiratory protection, or an air-supplied respirator.
<b>Gloves</b>	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.
<b>Eyes</b>	Safety goggles with safety shutters.
<b>Shoes</b>	Use safety shoes.
<b>Clothes</b>	Labcoat. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
<b>Engineering control</b>	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

<b>Physical state</b>	Solid
<b>Color</b>	Colorless to faint yellow
<b>Odour</b>	Data not available
<b>Odour threshold</b>	Data not available
<b>Melting point and freezing point</b>	Data not available
<b>Boiling point</b>	Data not available
<b>Flammability</b>	Data not available
<b>Lower flammable / Explosive limit</b>	Data not available
<b>Upper flammable / Explosive limit</b>	Data not available
<b>Flash point</b>	Data not available
<b>Auto-ignition temperature</b>	Data not available
<b>Decomposition temperature</b>	Data not available
<b>pH</b>	Data not available
<b>Kinematic viscosity</b>	Data not available
<b>Solubility</b>	Data not available
<b>Partition coefficient water/n-octanol</b>	Data not available
<b>Vapour pressure</b>	Data not available
<b>Relative density</b>	Data not available
<b>Vapour density</b>	Data not available
<b>Particle characteristics</b>	Powder $\geq 40$ mesh (420 $\mu\text{m}$ - 1 mm)

## SECTION 10 - STABILITY AND REACTIVITY

<b>Reactivity</b>	Flammable product, may ignite with source of ignition, if temperature above flash point. May react violently with incompatible substances.
<b>Chemical stability</b>	Stable under recommended storage conditions. May discolor on exposure to light.
<b>Possibility of hazardous reactions</b>	May form combustible dust concentrations in the air. May react violently with incompatible substances.
<b>Conditions to avoid</b>	Avoid moisture. Avoid contact with incompatible materials and extreme temperatures.
<b>Incompatible materials</b>	To our knowledge, the product has not been fully evaluated.
<b>Hazardous decomposition products</b>	Carbon monoxide (CO), Carbon dioxide (CO <sub>2</sub> ). Gaseous Hydrogen Chloride. Nitrogen oxides (NO <sub>x</sub> ).

## SECTION 11 - TOXICOLOGICAL INFORMATION

### 2,3,5-TRIPHENYL-2H-TETRAZOLIUM CHLORIDE

<b>Routes of exposure</b>	Ingestion, inhalation, skin and eye contact.
<b>Acute exposition effects / symptoms:</b>	By exposure route below.
- Eyes	Irritation. To our knowledge, the chemical, physical and toxicological properties have not been fully investigated.
- Skin	Irritation To our knowledge, the chemical, physical and toxicological properties have not been fully investigated.
- Inhalation	May irritate the respiratory system. To our knowledge, the chemical, physical and toxicological properties have not been fully investigated.
<b>Acute toxicity (Ingestion)</b>	To our knowledge, the chemical, physical and toxicological properties have not been fully investigated.
<b>Chronic exposure effects / symptoms</b>	To our knowledge, the chemical, physical and toxicological properties have not been fully investigated.
<b>DL50 (specify species and route of entry)</b>	LD50 Oral - Data not available. LD50 Dermal - Data not available.
<b>CL50 (specify species and route of entry)</b>	LC50 Inhalation - Data not available.

## SECTION 12 - ECOLOGICAL INFORMATION

### 2,3,5-TRIPHENYL-2H-TETRAZOLIUM CHLORIDE

<b>Ecotoxicity</b>	Data not available.
<b>Persistence and degradability</b>	Data not available.
<b>Bioaccumulative potential</b>	Data not available.
<b>Mobility in soil</b>	Data not available.
<b>Other adverse effects</b>	Data not available.

## SECTION 13 - DISPOSAL CONSIDERATIONS

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

## SECTION 14 - TRANSPORT INFORMATION

UN Number	1325
UN Proper shipping name	SOLIDE ORGANIQUE INFLAMMABLE, N.S.A. (Chlorure de 2,3,5-triphényltétrazolium)
Transport hazard class(es)	Solides inflammables
Packing group	II
Limited quantity index	
ERAP Index	.
Special precautions	16

## SECTION 15 - REGULATORY INFORMATION

WHIMS CANADA	<ul style="list-style-type: none"><li>- Flammable liquids - category 1</li><li>- Skin corrosion/irritation - Skin irritation - category 2</li><li>- Serious eye damage/eye irritation - Eye irritation - category 2A</li><li>- Specific target organ toxicity - Single exposure - category 3</li></ul>
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## 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: 2025-03-31**