



**Material Safety Data Sheet**

Section 1: Product and Company Identification			
<b>Product Name</b>	2,3,5-Triphenyltetrazolium chloride, TTC		
<b>Catalogue Number:</b>	ASC-1021		
<b>E-mail:</b>	Sales@ausamics.com	<b>Website:</b>	Ausamics.com

Section 2: Hazards Identification	
<b>Classification of the substance or mixture</b> Flammable solids, (Category 1) H228: Flammable solid. Skin irritation, (Category 2) H315: Causes skin irritation. Eye irritation, (Category 2) H319: Causes serious eye irritation.	
<b>Label elements</b> <b>Labelling according Regulation (EC) No 1272/2008</b>	
Pictogram	
Signal Word	Danger
<b>Hazard Statements</b> H228 Flammable solid. H315 Causes skin irritation. H319 Causes serious eye irritation.	
<b>Precautionary Statements</b> P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P240 Ground and bond container and receiving equipment. P241 Use explosion-proof electrical/ ventilating/ lighting/ equipment. P264 Wash skin thoroughly after handling. P302 + P352 IF ON SKIN: Wash with plenty of water. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Supplemental Hazard Statements none	
<b>Other hazards</b> This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher. Ecological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher. Toxicological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.	

Section 3: Composition / Information on Ingredients	
<b>Substances</b>	
Formula	C19H15N4.Cl



Molecular weight	334,80 g/mol		
CAS-No.	298-96-4		
EC-No.	206-071-6		
Component	Classification	Concentration	
<b>2,3,5-triphenyltetrazolium chloride</b>			
CAS-No.	298-96-4	Flam. Sol. 1; Skin Irrit. 2; Eye Irrit. 2; H228, H315, H319	<= 100 %
EC-No.	206-071-6		

<b>Section 4: First Aid Measures</b>	
<b>Description of first-aid measures</b>	
<b>General advice</b>	Show this material safety data sheet to the doctor in attendance.
<b>If inhaled</b>	After inhalation: fresh air.
<b>In case of skin contact</b>	In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower.
<b>In case of eye contact</b>	After eye contact: rinse out with plenty of water. Call in ophthalmologist. Remove contact lenses.
<b>If swallowed</b>	After swallowing: immediately make victim drink water (two glasses at most). Consult a physician.
<b>Most important symptoms and effects, both acute and delayed</b> The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11.	
<b>Indication of any immediate medical attention and special treatment needed</b> No data available	

<b>Section 5: Fire Fighting Measures</b>	
<b>Extinguishing media</b>	
<b>Suitable extinguishing media</b> Water Foam Carbon dioxide (CO2) Dry powder.	
<b>Unsuitable extinguishing media</b> For this substance/mixture no limitations of extinguishing agents are given.	
<b>Special hazards arising from the substance or mixture</b> Carbon oxides Nitrogen oxides (NOx) Hydrogen chloride gas Combustible. Development of hazardous combustion gases or vapors possible in the event of fire.	
<b>Advice for firefighters</b> Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.	
<b>Further information</b> Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.	

<b>Section 6: Accidental Release Measures</b>	
<b>Personal precautions, protective equipment and emergency procedures</b> Advice for non-emergency personnel: Avoid inhalation of dusts. Avoid substance contact. Ensure adequate ventilation. Keep away from heat and sources of ignition. Evacuate the danger area, observe emergency procedures, consult an expert.	



For personal protection see section 8.
<b>Environmental precautions</b> Do not let product enter drains. Risk of explosion.
<b>Methods and materials for containment and cleaning up</b> Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.
<b>Reference to other sections</b> For disposal see section 13.

<b>Section 7: Handling and Storage</b>	
<b>Precautions for safe handling</b>	
<b>Advice on protection against fire and explosion</b> Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharge.	
<b>Hygiene measures</b> Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance. For precautions see section 2.	
<b>Conditions for safe storage, including any incompatibilities</b>	
<b>Storage conditions</b>	Protect against light. Tightly closed. Keep away from heat and sources of ignition.
<b>Storage stability</b>	Recommended storage temperature.
<b>Storage class</b>	Storage class (TRGS 510): 4.1B: Flammable solid hazardous materials.

<b>Section 8: Exposure Controls / Personal Protection</b>	
<b>Control parameters</b>	
<b>Ingredients with workplace control parameters</b>	
<b>Exposure controls</b>	
<b>Personal protective equipment</b>	
<b>Eye/face protection</b> Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses.	
<b>Skin protection</b> Full contact Material: Nitrile rubber Minimum layer thickness: 0,11 mm Break through time: 480 min Material tested: KCL 741 Dermatril® L Splash contact Material: Nitrile rubber Minimum layer thickness: 0,11 mm Break through time: 480 min Material tested: KCL 741 Dermatril® L	
<b>Body Protection</b> Flame retardant antistatic protective clothing.	
<b>Respiratory protection</b> required when dust is generated. Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.	



Recommended Filter type: Filter type P2  
 The entrepreneur must ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures must be properly documented.

**Control of environmental exposure**  
 Do not let product enter drains. Risk of explosion.

<b>Section 9: Physical and Chemical Properties</b>	
Physical state	Solid
Color	No data available
Odor	No data available
Melting point/freezing point	No data available
Initial boiling point and boiling range	No data available
Flammability (solid, gas)	The substance or mixture is a flammable solid with the category 1.
Upper/lower flammability or explosive limits	No data available
Flash point	No data available
Vapor pressure	No data available
Autoignition temperature	No data available
Decomposition temperature	No data available
pH	No data available
Viscosity	Viscosity, kinematic: No data available Viscosity, dynamic: No data available
Water solubility	No data available
Partition coefficient: n-octanol/water	No data available
Density	No data available
Relative density	No data available
Relative vapor density	No data available
Particle characteristics	No data available
Explosive properties	No data available
Oxidizing properties	none
<b>Other safety information</b>	No data available

<b>Section 10: Stability and Reactivity</b>	
<b>Reactivity</b>	The following applies in general to flammable organic substances and mixtures: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed.
<b>Chemical stability</b>	The product is chemically stable under standard ambient conditions (room temperature). May discolor on exposure to light.



<b>Possibility of hazardous reactions</b> No data available
<b>Conditions to avoid</b> Exposure to light. Exposure to moisture. no information available
<b>Incompatible materials</b> No data available
<b>Hazardous decomposition products</b> In the event of fire: see section 5.

<b>Section 11: Toxicological Information</b>	
<b>Information on toxicological effects</b>	
<b>Mixture</b>	
<b>Acute toxicity</b>	Oral: No data available Inhalation: No data available Dermal: No data available
<b>Skin corrosion/irritation</b>	No data available
<b>Serious eye damage/eye irritation</b>	No data available
<b>Respiratory or skin sensitization</b>	No data available
<b>Germ cell mutagenicity</b>	No data available
<b>Carcinogenicity</b>	No data available
<b>Reproductive toxicity</b>	No data available
<b>Specific target organ toxicity - single exposure</b>	No data available
<b>Specific target organ toxicity - repeated exposure</b>	No data available
<b>Aspiration hazard</b>	No data available
<b>Additional Information</b>	
<b>Endocrine disrupting properties Product:</b> Assessment	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.
RTECS: XF8100000 To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.	

<b>Section 12: Ecological Information</b>	
<b>Toxicity</b>	No data available
<b>Persistence and degradability</b>	No data available
<b>Bio accumulative potential</b>	No data available
<b>Mobility in soil</b>	No data available
<b>Results of PBT and vPvB assessment</b>	This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or



	very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.
<b>Endocrine disrupting properties</b> <b>Product:</b> Assessment	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.
<b>Other adverse effects</b>	No data available

<b>Section 13: Disposal Consideration</b>	
<b>Waste treatment methods</b> <b>Product</b>	Offer surplus and non- recyclable solutions to a licensed company. Contact a licensed professional waste disposal service to dispose of this material.
<b>Contaminated packaging</b>	Dispose of as unused product.

<b>Section 14: Transport Information</b>	
<b>UN number</b>	ADR/RID: 1325 IMDG: 1325 IATA: 1325
<b>UN proper shipping name</b>	ADR/RID: FLAMMABLE SOLID, ORGANIC, N.O.S. (2,3,5 triphenyl tetrazolium chloride) IMDG: FLAMMABLE SOLID, ORGANIC, N.O.S. (2,3,5-triphenyltetrazolium chloride) IATA: Flammable solid, organic, n.o.s. (2,3,5-triphenyltetrazolium chloride)
<b>Transport hazard class(es)</b>	ADR/RID: 4.1 IMDG: 4.1 IATA: 4.1
<b>Packaging group</b>	ADR/RID: II IMDG: II IATA: II
<b>Environmental hazards</b>	ADR/RID: no IMDG Marine pollutant: no IATA: no
<b>Special precautions for user</b>	Tunnel restriction code: (E)
<b>Further information</b>	No data available

<b>Section 15: Regulatory Information</b>	
<b>Safety, health and environmental regulations/legislation specific for the substance or mixture</b>	This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.
<b>Other regulations</b>	Take note of Dir 94/33/EC on the protection of young people at work.
<b>Chemical Safety Assessment</b>	For this product a chemical safety assessment was not carried out.

<b>Section 16: Additional Notes</b>	
<b>Documented By</b>	Ausamics Life Science Sales@Ausamics.com
<b>Revision date</b>	June 08, 2024



<b>Summary of Revisions</b>	This document has been revised to meet the requirements of the US OSHA HazCom 2012 Standard, which supersedes the existing regulations outlined in 29 CFR 1910.1200, in order to align with the internationally recognized globally Harmonized System of Classification and Labeling of chemicals (GHS).
<b>Disclaimer</b>	The information presented in this Safety Data sheet is accurate to the best of our knowledge, information, and belief at the time of publication. It is intended as a guide for the safe handling, use, processing, storage, transportation, disposal, and release of specific materials. However, it should be interpreted as a warranty or quality specification. The provided information pertains solely to the designated material and may not be applicable to its use in combination with other materials or in any process, unless explicitly stated in the text.