



2,3,5-TRIPHENYL TETRAZOLIUM CHLORIDE

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Carolina Biological Supply Company

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Section 1 - Product Description

Product Name: 2,3,5-Triphenyl Tetrazolium chloride

Product Code(s): 20-6070, 89-6930, 89-6932, 89-6934

Size: 5g, 10g, 25g

Chemical Name: 2,3,5 Triphenyl-2H-Tetrazolium Chloride

CAS Number: 298-96-4

Formula: C₁₉H₁₅ClN₄

Synonyms: PTB, Red Tetrazolium, Tetrazolium Chloride

Distributor: Carolina Biological Supply Company, 2700 York Road, Burlington, NC 27215

Chemical Information: 800-227-1150 (8am-5pm (ET) M-F) **Chemtrec** 800-424-9300 (Transportation Spill Response 24 hours)

Section 2 - Composition / Information on Ingredients

Principal Hazardous Components: 2,3,5-Triphenyl Tetrazolium chloride (CAS#298-96-4) 100%

TLV units: N/A

PEL units: N/A

Section 3 - Hazard Identification

Emergency Overview: Harmful by inhalation, in contact with skin and if swallowed.

Potential Health Effects:

Eyes: May cause irritation.

Skin: Irritating to skin.

Ingestion: Harmful if swallowed.

Inhalation: Irritating to respiratory system.

Section 4 - First Aid Measures

Emergency and First Aid Procedures:

Eyes - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Skin - After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of ...
(Water, unless specified as a water reactive material).

Ingestion - If swallowed, seek medical advice immediately and show this container or label.

Inhalation - In case of accident by inhalation: remove casualty to fresh air and keep at rest.

Section 5 - Firefighting Procedures

Flash Point (Method Used): N/A

NFPA Rating:

Health: 1

Fire: 1

Reactivity: 0

Extinguisher Media: Use dry chemical, CO₂ or appropriate foam.

Flammable Limits in Air % by Volume: N/A N/A

Autoignition Temperature: N/A

Special Firefighting Procedures: Firefighters should wear full protective equipment and NIOSH approved self-contained breathing apparatus.

Unusual Fire and Explosion Hazards: Fire or excessive heat may produce hazardous decomposition products.

Section 6 - Spill or Leak Procedures

Steps to Take in Case Material Is Released or Spilled: Ventilate area of spill. Clean-up personnel should wear proper protective equipment. Avoid creating dust. Sweep or scoop up and containerize for disposal.

Section 7 - Special Precautions

Precautions to Take in Handling or Storing: Keep container tightly closed in a cool, well-ventilated place. Keep container tightly closed in a cool, well-ventilated place.

Section 8 - Protection Information

Respiratory Protection (Specify Type): None needed under normal conditions of use with adequate ventilation. A NIOSH/MSHA chemical cartridge respirator should be worn if PEL or TLV is exceeded.

Ventilation:

Local Exhaust: Yes

Mechanical(General): Yes

Special: No

Other: No

Protective Gloves: Natural rubber, Neoprene, PVC or equivalent.

Eye Protection: Splash proof chemical safety goggles should be worn.

Other Protective Clothing or Equipment: Lab coat, apron, eye wash, safety shower.

Section 9 - Physical Data

Molecular Weight: 334 g/mol

Boiling Point: N/A

Vapor Density(Air=1): N/A

Percent Volatile by Volume: N/A

Solubility in Water: Soluble

Melting Point: 243 °C (decomposes)

Vapor Pressure: N/A

Specific Gravity (H₂O=1): N/A

Evaporation Rate (BuAc=1): N/A

Appearance and Odor: Off-white powder.

Section 10 - Reactivity Data

Stability: Stable

Conditions to Avoid: Direct sunlight; Product is photosensitive.

Incompatibility (Materials to Avoid): Oxidizers,

Hazardous Decomposition Products: HCl, CO_x, NO_x,

Hazardous Polymerization: Will not occur

Section 11 - Toxicity Data

Toxicity Data: itv-mus LD50 5.6 mg/kg

Effects of Overexposure:

Acute: See section 3

Chronic: Not listed as a carcinogen by IARC, NTP or OSHA.

Conditions Aggravated by Overexposure: None Known

Target Organs: No information available

Primary Route(s) of Entry: Inhalation, ingestion, eye or skin contact.

Section 12 - Ecological Data

EPA Waste Numbers: N/A

Section 13 - Disposal Information

Waste Disposal Methods: Dispose in accordance with all applicable Federal, State and Local regulations. Always contact a permitted waste disposer (TSD) to assure compliance.

Section 14 - Transport Information

DOT Proper Shipping Name: N/A

Section 15 - Regulatory Information

EPA TSCA Status: On TSCA Inventory

Hazard Category for SARA Section 311/312 Reporting: Acute

Name List:

2,3,5-Triphenyl Tetrazolium Chloride - No

Chemical Category:

2,3,5-Triphenyl Tetrazolium Chloride - No

CERCLA Section 103 RQ(lb.): 2,3,5-Triphenyl Tetrazolium Chloride - No

RCRA Section 261.33: 2,3,5-Triphenyl Tetrazolium Chloride - No

Section 16 - Additional Information

The information provided in this Material Safety Data Sheet represents a compilation of data drawn directly from various sources available to us. Carolina Biological Supply makes no representation or guarantee as to the suitability of this information to a particular application of the substance covered in the Material Safety Data Sheet. Any employer must carefully assess the applicability of any information contained herein in regards to the particular use to which the employer puts the material.

Glossary

ACGIH	American Conference of Governmental Industrial Hygienists
CAS Number	Chemical Services Abstract Number
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
DOT	U.S. Department of Transportation
IARC	International Agency of Research on Cancer
N/A	Not Available
NTP	National Toxicology Program
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
ppm	Parts per million

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RCRA	Resource Conservation and Recovery Act
SARA	Superfund Amendments and Reauthorization Act
TLV	Threshold Limit Value
TSCA	Toxic Substances Control Act