

MATERIAL SAFETY DATA SHEET

Chemical Product

Product Name: 2,3,5-TRIPHENYL TETRAZOLIUM CHLORIDE AR
 CAS#: 298-96-4
 C.I. No.: Not available.
 Synonym: Tetrazolium Salt.
 Chemical Name: Not available.
 Chemical Formula: C₁₉H₁₅ClN₄

Composition and Information on Ingredients

Name	S.K.U	% by Weight
2,3,5-TRIPHENYL TETRAZOLIUM CHLORIDE AR	GCS-1394	100

Hazards Identification

Classification of the substance or mixture

Classification according to Regulation
 (EC) No 1999/45 Classification : Xi;
 R36/37/38

Hazard Class and Category Code(s), Regulation (EC) No 1272/2008 (CLP)

Health hazards : Specific Target Organ Toxicity - Single exposure -
 Respiratory tract irritation - Category 3 - Warning (CLP :
 STOT SE 3) H335
 Acute toxicity, Inhalation - Category 4 - Warning (CLP
 : Acute Tox. 4) H332 Acute toxicity, Oral - Category 4 -
 Warning (CLP : Acute Tox. 4) H302 Acute toxicity,
 dermal - Category 4 - Warning (CLP : Acute Tox. 4)
 H312 Skin irritation - Category 2 - Warning (CLP : Skin
 Corr. 2) H315
 Eye irritation - Category 2A - Warning (CLP : Eye Irrit. 2)
 H319

Other hazards : The substance does not fulfil the criteria to be identified as PBT substance
 or vPvB substance according to Annex XIII of Regulation REACH.

First Aid Measures

Description of first aid measures

In Inhalation

Remove to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor if you feel unwell.

Skin contact

Immediately call a POISON CENTER or doctor. Specific treatment (see on this label). If skin irritation occurs : Get medical advice. Wash with plenty of soap and water. Wash contaminated clothing before reuse. Eye contact

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists : Get medical advice.

Ingestion :

Obtain emergency medical attention. Rinse mouth. Do NOT induce vomiting. Call a POISON CENTER or doctor if you feel unwell.

Most important symptoms and effects, both acute and delayed

Symptoms relating to use : Repeated exposure to this material can result in absorption through skin causing significant health hazard.

Danger of serious damage to health by prolonged exposure through inhalation.

Swallowing a small quantity of this material will result in serious health hazard.

Causes serious eye irritation.

Causes skin irritation. May cause respiratory irritation.

Indication of any immediate medical attention and special treatment needed

General information: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

Fire and Explosion Data**Extinguishing media**

Extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable extinguishing media : Do not use a heavy water stream.

Surrounding fires : Use water spray or fog for cooling exposed containers.

Special hazards arising from the substance or mixture

Hazardous combustion products : Under fire conditions, hazardous fumes will be present.

Advice for fire-fighters

Protection against fire : Do not enter fire area without proper protective equipment,

Including respiratory protection.

Special procedures fire. Avoid (reject)	: Exercise caution when fighting any chemical fire-fighting water to enter environment.
Accidental Release Measures	
Personal precautions, protective equipment and emergency procedures For emergency responders with proper protection.	: Equip cleanup crew Ventilate area.
For non-emergency personnel	: Evacuate unnecessary personnel.
Environmental precautions	
Environmental precautions	: Prevent entry to sewers and public waters.
Notify authorities if	product enters sewers or public waters.
Methods and materials for containment and cleaning up	
Clean up methods : On land, sweep or shovel into suitable containers. Minimize generation of dust. Store away from other materials.	
Handling and Storage	
Precautions for safe handling	
Handling	: Use only outdoors or in a well-ventilated area. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Wash thoroughly after handling.
Technical protective measures prevent formation of	: Provide good ventilation in process area to Vapor.
Special precautions vapours, spray.	: Avoid breathing dust, fume, gas, mist,
Conditions for safe storage, including any incompatibilities	
Storage	: Keep only in the original container in a cool, well ventilated place. Keep container closed.
Storage - away from ignition. Direct sunlight.	: Strong bases. Strong acids. Sources of
Specific end uses	
Specific end use(s)	: None.
Exposure Controls/Personal Protection	
Personal protection	: Avoid all unnecessary exposure.

- Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment.
- Hand protection : Wear protective gloves.
- Skin protection : Wear suitable protective clothing.
- Eye protection : Chemical goggles or safety glasses.
- Others : When using, do not eat, drink or smoke.

Control parameters

Occupational Exposure Limits : No data available.

Physical and Chemical Properties

Information on basic physical and chemical properties Physical state at 20 °C

: **Solid.**

Color : Buff coloured powder
 Odor : Odourless
 Odor threshold : No data available.
 pH value : No data available.
 Melting point [°C] : 235 °C
 Decomposition point [°C] : No data available.
 Critical temperature [°C] : No data available.
 Auto-ignition temperature [°C] : No data available.
 Flammability (solid, gas) : No data available.
 Flash point [°C] : No data available.
 Boiling point [°C] : No data available.
 Initial boiling point [°C] : No data available.
 Final boiling point [°C] : No data available.
 Evaporation rate : No data available.
 Vapour pressure [20°C] : No data available.
 Vapour pressure mm/Hg : No data available.
 Vapour density : 11,5
 Density [g/cm³] : No data available.
 Relative density, gas (air=1) : No data available.
 Relative density, liquid (water=1) : No data available.
 Solubility in water [% weight] : Soluble in water
 Solubility in water : No data available.
 Log Pow octanol / water at 20°C : No data available.
 Solubility : No data available.
 Viscosity at 40°C [mm²/s] : No data available.
 Molecular Weight : 334.81

Other information

Explosive properties : No data available.
 Explosion limits - upper [%] : No data available.

Explosion limits - lower [%]	: No data available.
Oxidizing properties	: No data available.

Stability and Reactivity Data

Reactivity

Reactivity : Not established.

Chemical stability

Chemical stability : Stable under recommended storage conditions.

Possibility of
hazardous
reactions
Hazardous
reactions :

Not established.

Conditions to avoid

Conditions to avoid : Direct sunlight. Extremely high or low temperatures.

Incompatible materials

Materials to avoid : Strong acids. Strong bases.

Hazardous decomposition products

Hazardous decomposition products : Fumes. Carbon monoxide. Carbon dioxide.

Toxicological Information

Information on toxicological effects

Acute toxicity

• Inhalation : Harmful if inhaled.

• Dermal : Harmful in contact with skin.

• Ingestion : Harmful if swallowed.

Corrosion : Based on available data, the classification criteria are not met.

Irritation : Causes serious eye irritation.

Causes skin irritation.

May cause respiratory irritation.

Sensitization : Based on available data, the classification criteria are not met.

Mutagenicity : Based on available data, the classification criteria are not met.

Carcinogenicity : Based on available data, the classification criteria are not met.

Toxic for reproduction : Based on available data, the classification criteria are not

met.

STOT-single exposure : Based on available data, the classification criteria are not met.

STOT-repeated exposure : Based on available data, the classification criteria are not met.

Aspiration hazard : Based on available data, the classification criteria are not met.

Ecological Information

Toxicity

Toxicity information : Not established.

Persistence – degradability

Persistence - degradability : Biodegradable.

Bio accumulative potential

Bio accumulative potential : Not established.

Mobility in soil

Mobility in soil : Not established.

Results of PBT and vPvB assessment

Results of PBT and vPvB assessment: The substance does not fulfil the criteria to be identified as PBT substance or vPvB substance according to Annex XIII of Regulation REACH.

Other adverse effects

Environmental precautions: Avoid release to the environment.

Disposal Considerations

Waste treatment methods

General: Avoid release to the environment. Dispose in a safe manner in accordance with local/national regulations. Dispose of this material and its container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

Transformation Information

Land transport (ADR-RID)

General information : Not regulated.

Sea transport (IMDG)

General information : Not regulated.

Air transport (ICAO-IATA)

General information

: Not regulated.

Other Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture

Safety, health and environmental: Ensure all national/local regulations are observed.
 Regulations/legislation specific for
 The substance or
 mixture

REACH Restrictions - Annex XVII: The components of this product are not subject to restrictions.

REACH Authorization - Annex XIV: The components of this product are not subject to authorization.

Chemical Safety Assessment

Chemical Safety Assessment: It has not been carried out.

Additional Information

References: Not available.


Other Special Considerations: Not available.

Disclaimer:

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