

**Section 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier****Product name:** TRIPHENYLTETRAZOLIUM CHLORIDE**CAS number:** 298-96-4**Product code:** A72138**Synonyms:** 2,3,5-TRIPHENYLTETRAZOLIUM CHLORIDE**1.2. Relevant identified uses of the substance or mixture and uses advised against****1.3. Details of the supplier of the safety data sheet****Company name:** Philip Harris Ltd  
2 Gregory Street  
Hyde  
Cheshire  
SK14 4HR  
United Kingdom**Tel:** +44 (0)845 1200 506**Fax:** +44 (0)161 367 2140**Email:** [enquiries@philipharris.co.uk](mailto:enquiries@philipharris.co.uk)**1.4. Emergency telephone number****Emergency tel:** +44 (0) 845 1200 506**Section 2: Hazards identification****2.1. Classification of the substance or mixture****Classification under CLP:** Eye Irrit. 2: H319; Skin Irrit. 2: H315; STOT SE 3: H335**Classification under CHIP:** Xi: R36/37/38**Most important adverse effects:** Causes serious eye irritation. May cause respiratory irritation. Causes skin irritation.**2.2. Label elements****Label elements under CLP:****Hazard statements:** H319: Causes serious eye irritation.  
H335: May cause respiratory irritation.  
H315: Causes skin irritation.**Signal words:** Warning**Hazard pictograms:** GHS07: Exclamation mark

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**Precautionary statements:** P280: Wear.  
P302+352: IF ON SKIN: Wash with plenty of soap and water.  
P304+340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P309+311: IF exposed or if you feel unwell: Call a POISON CENTER or doctor.

### 2.3. Other hazards

**PBT:** This product is not identified as a PBT substance.

## Section 3: Composition/information on ingredients

### 3.1. Substances

**Chemical identity:** TRIPHENYLTETRAZOLIUM CHOLORIDE

**Contains:** Molecular Formula: C<sub>19</sub>H<sub>15</sub>CIN<sub>4</sub>

Molecular Weight: 334.81 g/mol

## Section 4: First aid measures

### 4.1. Description of first aid measures

**Skin contact:** After contact with skin, wash immediately with plenty of water and soap. Remove contaminated, saturated clothing immediately. In case of skin reactions, consult a Doctor

**Eye contact:** Bathe the eye with running water for 15 minutes. Protect Uninjured eye. Remove contact lenses, if present and easy to do. Consult a doctor.

**Ingestion:** Rinse mouth thoroughly with water. Do not induce vomiting. Give nothing to eat or drink. Immediately call the POISON CENTRE or a doctor.

**Inhalation:** Move to fresh air in case of accidental inhalation of vapours. If breathing is irregular or stopped, administer artificial respiration. Keep Patient warm. Consult a doctor.

### 4.2. Most important symptoms and effects, both acute and delayed

**Skin contact:** May be harmful if absorbed through skin. May cause skin irritation.

**Eye contact:** There may be irritation and redness.

**Ingestion:** May be harmful if swallowed.

**Inhalation:** May be harmful if inhaled. May cause respiratory tract irritation.

**Delayed / immediate effects:** No data available.

### 4.3. Indication of any immediate medical attention and special treatment needed

## Section 5: Fire-fighting measures

### 5.1. Extinguishing media

**Extinguishing media:** The product itself does not burn. Co-ordinate fire-fighting measures to the fire surroundings.

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**5.2. Special hazards arising from the substance or mixture**

**Exposure hazards:** In case of fire may be liberated: Carbon Dioxide (CO<sub>2</sub>) Carbon monoxide Hydrogen chloride (HCl) Nitrogen oxides (NO<sub>x</sub>) Sulphur oxides.

**5.3. Advice for fire-fighters**

**Advice for fire-fighters:** DO NOT fight fire when fire reaches explosives. Wear self-contained breathing apparatus.

**Section 6: Accidental release measures**

**6.1. Personal precautions, protective equipment and emergency procedures**

**Personal precautions:** Avoid generation of dust. Do not breath dust. Ensure adequate ventilation. Use personal protection equipment.

**6.2. Environmental precautions**

**Environmental precautions:** Do not allow to enter into soil/subsoil. Do not discharge into drains or rivers.

**6.3. Methods and material for containment and cleaning up**

**Clean-up procedures:** Spilled product must never be returned to the original container for recycling. Clean contaminated objects and areas thoroughly observing environmental regulations. Collect in closed and suitable containers for disposal.

**6.4. Reference to other sections**

**Section 7: Handling and storage**

**7.1. Precautions for safe handling**

**Handling requirements:** Avoid contact with skin and eyes. Use extractor hood (laboratory). If handled uncovered, arrangements with local exhaust ventilation have to be used. If local exhaust ventilation is not possible or not sufficient, the entire working area must be ventilated by technical means. Protect from moisture.

**7.2. Conditions for safe storage, including any incompatibilities**

**Storage conditions:** Keep Container tightly closed in a cool, well-ventilated place. Storage temperature : 2 - 8°C

**7.3. Specific end use(s)**

**Specific end use(s):** No data available.

**Section 8: Exposure controls/personal protection**

**8.1. Control parameters**

**Workplace exposure limits:** No data available.

**8.1. DNEL/PNEC Values**

**DNEL / PNEC** No data available.

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**8.2. Exposure controls**

**Engineering measures:** Technical measures and the application of suitable work processes have priority over personal protection equipment. If handle uncovered, arrangements with local exhaust ventilation have to be used.

**Respiratory protection:** Filtering half face mask (DIN EN 149)

**Hand protection:** For short term hand contact use nitrile rubber gloves, 0.12mm thick and with a break through time of 480 mins. For long term hand contact wear nitrile rubber gloves, 0.38mm thick with a breakthrough time of 480mins.

**Eye protection:** Safety glasses with side-shields.

**Skin protection:** Wash hands before breaks and after work. Avoid contact with skin and eyes. When using do not eat, drink or smoke. Protective clothing.

**Section 9: Physical and chemical properties**

**9.1. Information on basic physical and chemical properties**

**State:** Solid

**Colour:** Light Yellow

**Evaporation rate:** No data available

**Oxidising:** No data available

**Solubility in water:** Soluble: ~150 g/l (20°C)

**Also soluble in:** No data available.

**Viscosity:** No data available

**Viscosity test method:** No data available.

**Boiling point/range°C:** Min. 360°C(1013 hPa)

**Melting point/range°C:** 235°C

**9.2. Other information**

**Other information:** No data available.

**Section 10: Stability and reactivity**

**10.1. Reactivity**

**Reactivity:** No data available.

**10.2. Chemical stability**

**Chemical stability:** No data available.

**10.3. Possibility of hazardous reactions**

**Hazardous reactions:** No data available.

**10.4. Conditions to avoid**

**Conditions to avoid:** No data available

**10.5. Incompatible materials**

**Materials to avoid:** No data available.

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**10.6. Hazardous decomposition products**

**Haz. decomp. products:** No data available.

**Section 11: Toxicological information**

**11.1. Information on toxicological effects**

**Relevant hazards for substance:**

Hazard	Route	Basis
Skin corrosion/irritation	DRM	Based on test data
Serious eye damage/irritation	OPT	Based on test data
STOT-single exposure	INH	Based on test data

**Symptoms / routes of exposure**

**Skin contact:** May be harmful if absorbed through skin. May cause skin irritation.

**Eye contact:** There may be irritation and redness.

**Ingestion:** May be harmful if swallowed.

**Inhalation:** May be harmful if inhaled. May cause respiratory tract irritation.

**Delayed / immediate effects:** No data available.

**Section 12: Ecological information**

**12.1. Toxicity**

**Ecotoxicity values:** No data available.

**12.2. Persistence and degradability**

**Persistence and degradability:** No data available.

**12.3. Bioaccumulative potential**

**Bioaccumulative potential:** No data available.

**12.4. Mobility in soil**

**Mobility:** No data available.

**12.5. Results of PBT and vPvB assessment**

**PBT identification:** This product is not identified as a PBT substance.

**12.6. Other adverse effects**

**Other adverse effects:** No data available.

**Section 13: Disposal considerations**

**13.1. Waste treatment methods**

**Disposal operations:** Dispose according to legislation. Consult the appropriate local waste disposal expert about waste disposal.

**NB:** The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

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**Section 14: Transport information**

**Transport class:** This product does not require a classification for transport.

**Section 15: Regulatory information**

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

**15.2. Chemical Safety Assessment**

**Section 16: Other information**

**Other information**

**Other information:** This safety data sheet is prepared in accordance with Commission Regulation (EU) No 453/2010.

\* indicates text in the SDS which has changed since the last revision.

**Phrases used in s.2 and 3:** H315: Causes skin irritation.

H319: Causes serious eye irritation.

H335: May cause respiratory irritation.

R36/37/38: Irritating to eyes, respiratory system and skin.

**Legal disclaimer:** The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.