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CIN U46909GJ2025PTC164345

MATERIAL SAFETY DATA SHEET — 16-section GHS format

# Tris(4-chlorophenyl)phosphine

CAS 1159-54-2 · 98% min.

## 1. IDENTIFICATION OF THE SUBSTANCE AND OF THE SUPPLIER

| | |
|---|---|
| Product Name | Tris(4-chlorophenyl)phosphine |
| C.A.S. Number | 1159-54-2 |
| Product Category | Laboratory & Analytical Reagents |
| Product Group | Biological Buffers |
| Grade / Standard | 98% min. |
| Identified Uses | Biological buffering in cell culture and assays. Industrial and professional use. |
| Supplier | Scapex Exports Pvt. Ltd., 830, 8th Floor, Sun Gravitas, Times of India Road, Shyamal, Ahmedabad 380015, Gujarat, India |
| Emergency Telephone | +91 9925522674 (Mon–Sat, 09:30–18:30 IST) |

## 2. HAZARDS IDENTIFICATION

| | |
|---|---|
| GHS Classification | Not classified as dangerous for transport |
| Signal Word | **WARNING** |
| Pictograms | Exclamation mark |

Exclamation mark

### Hazard statements

- H315 — Causes skin irritation.
- H319 — Causes serious eye irritation.

### Precautionary statements

- P101 If medical advice is needed, have product container or label at hand.
- P102 Keep out of reach of children.
- P262 Do not get in eyes, on skin, or on clothing.
- P264 Wash hands thoroughly after handling.
- P280 Wear protective gloves and eye protection.

- P302+P352 IF ON SKIN: Wash with plenty of water.
- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes.
- P337+P313 If eye irritation persists: Get medical advice / attention.

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

| | |
|---|---|
| Chemical Identity | Tris(4-chlorophenyl)phosphine |
| C.A.S. Number | 1159-54-2 |
| Concentration / Grade | 98% min. |
| Impurities | No impurities present at concentrations that alter the classification. |

## 4. FIRST-AID MEASURES

| | |
|---|---|
| Inhalation | Remove to fresh air and keep at rest in a position comfortable for breathing. If breathing is difficult give oxygen. Obtain medical attention. |
| Skin contact | Remove contaminated clothing. Wash the affected area with plenty of soap and water for at least 15 minutes. Obtain medical attention if irritation persists. |
| Eye contact | Rinse immediately with plenty of water for at least 15 minutes holding the eyelids open. Remove contact lenses if present and easy to do. Obtain immediate medical attention. |
| Ingestion | Do NOT induce vomiting. Rinse the mouth with water. Never give anything by mouth to an unconscious person. Obtain immediate medical attention and show this Material Safety Data Sheet. |
| Note to physician | Treat symptomatically. No specific antidote is known. |

## 5. FIRE-FIGHTING MEASURES

| | |
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| Suitable extinguishing media | Water spray, dry chemical powder, carbon dioxide or alcohol-resistant foam. |
| Unsuitable extinguishing media | High-pressure water jet. |
| Specific hazards | Thermal decomposition may generate irritating and toxic gases. |
| Advice for fire-fighters | Wear self-contained breathing apparatus and full protective clothing. Prevent fire-fighting water entering drains or watercourses. |

## 6. ACCIDENTAL RELEASE MEASURES

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|---|---|
| Personal precautions | Evacuate unnecessary personnel. Ensure adequate ventilation. Wear the protective equipment described in Section 8. Eliminate ignition sources where the product is flammable. |
| Environmental precautions | Prevent entry into drains, sewers, surface water and groundwater. Notify the authorities if release to the environment occurs. |

| | |
|---|---|
| Containment and cleaning | Contain with an inert absorbent (dry sand, earth or vermiculite) and collect into a labelled closed container for disposal. Do not use combustible absorbents where the product is an oxidiser. Ventilate the area and wash the spill site after pick-up. |

## 7. HANDLING AND STORAGE

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|---|---|
| Handling | Use only in well-ventilated areas. Avoid contact with skin, eyes and clothing. Avoid formation and inhalation of dust, mist or vapour. Do not eat, drink or smoke in the work area. |
| Storage | Store in the original tightly closed container in a cool, dry, well-ventilated place away from direct sunlight and heat, and away from the incompatible materials listed in Section 10. |
| Packaging | Use only the original packaging or an equivalent material approved for this product. |

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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|---|---|
| Occupational exposure limits | Refer to the national occupational exposure limits applicable in the country of use. Where no limit is established, keep airborne concentrations as low as reasonably practicable. |
| Engineering controls | Local exhaust ventilation at points of dust, mist or vapour generation. Eyewash stations and safety showers close to the work station. |
| Eye / face protection | Chemical safety goggles to EN 166 / IS 5983. Face shield where splashing is possible. |
| Skin protection | Chemical-resistant gloves to EN 374 (nitrile or butyl rubber). Chemical-resistant apron, suit and boots as required by the task. |
| Respiratory protection | Where ventilation is insufficient use an approved respirator with a P2/P3 particulate filter for dusts or an appropriate vapour cartridge for solvents. |

## 9. PHYSICAL AND CHEMICAL PROPERTIES

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| Appearance | White crystalline powder |
| Odour | Characteristic |
| Physical state | Solid |
| Flash point | Not applicable |
| Purity / assay | 98% min. |
| pH, melting point, boiling point, density, solubility | See the Tris(4-chlorophenyl)phosphine specification sheet |

## 10. STABILITY AND REACTIVITY

| | |
|---|---|
| Reactivity | Stable under the recommended handling and storage conditions. |
| Conditions to avoid | Heat, direct sunlight, moisture, ignition sources and mechanical damage to packaging. |
| Incompatible materials | Strong oxidising agents, strong acids and strong bases. |
| Hazardous decomposition products | Oxides of carbon and other toxic fumes on thermal decomposition. |

## 11. TOXICOLOGICAL INFORMATION

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|---|---|
| Likely routes of exposure | Inhalation, skin contact, eye contact and ingestion. |
| Acute toxicity | Product-specific LD50/LC50 data available from the manufacturer on request. |
| Carcinogenicity | Not classified as carcinogenic. |
| Reproductive toxicity | Not classified. |

## 12. ECOLOGICAL INFORMATION

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|---|---|
| Aquatic toxicity | No significant ecotoxicity expected at normal use concentrations. |
| Persistence and degradability | Assess against local discharge consent limits before release. |
| Other adverse effects | Do not allow the product to enter drains, sewers or watercourses. |

## 13. DISPOSAL CONSIDERATIONS

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|---|---|
| Waste treatment | Dispose of product and container through an authorised waste treatment or disposal facility in accordance with local, state and national regulations. |
| Contaminated packaging | Empty containers retain product residue. Triple-rinse where appropriate and offer for approved reconditioning or disposal. |

## 14. TRANSPORT INFORMATION

| | |
|---|---|
| UN number | Not regulated |
| UN proper shipping name | Not applicable |
| Transport hazard class | — |
| Packing group | — |
| Marine pollutant | No |
| IMDG / IATA / ADR | Not classified as dangerous goods for transport by sea, air or road. |

## 15. REGULATORY INFORMATION

| | |
|---|---|
| Classification system | GHS Rev. 9; CLP Regulation (EC) No. 1272/2008. |
| EU REACH | Registration status held by the manufacturer. A REACH statement is available on request. |
| India | Manufacture, Storage and Import of Hazardous Chemicals Rules, as applicable. |

## 16. OTHER INFORMATION

| | |
|---|---|
| Basis of classification | Assigned on the basis of the chemical class of the product and the standard commercial grade supplied. Where the manufacturer of a particular batch publishes a different classification, that classification governs. |
| Revision | Revision 1 — first issue |
| Prepared by | Quality Assurance, Scapex Exports Pvt. Ltd. |

**Disclaimer.** This Material Safety Data Sheet is provided in good faith and is believed correct at the date of issue. It relates only to the material identified and is not a specification. It does not constitute a warranty of merchantability or fitness for a particular purpose. Users must satisfy themselves as to its suitability and completeness for their own use.

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