

SECTION-1: Identification of the substance / mixture and the company / undertaking

| | |
|-----------------------------|---|
| Catalogue Number | CS-DV-00429 |
| Product Name | (tributylphosphoranylidene)acetonitrile |
| CAS No. | 157141-27-0 |
| Category | Reagents |
| Synonyms | Cyanomethylenetriethylphosphorane : Tsunoda Reagent |
| Brand | Clearsynth Labs Ltd. |
| Identified uses | Laboratory Chemicals |
| Uses advised against | Not available |
| Company | Clearsynth Labs Ltd. Mumbai, India |
| Emergency Phone # | +91-22-245045900 |
| REACH No. | Not available |

SECTION 2: Hazards identification

Disclaimer: This is sample MSDS. Please email sales@clearsynth.com for more details.

2.1 Classification of the substance or mixture-Regulation (EC) No 1272/2008:

- Skin irritation (Category 2)
- Serious eye damage/eye irritation (Category 2)
- Acute toxicity (Category 4)

2.2 Label Elements

Signal Word: Warning



Hazard Statement(s)

| Code | Statement |
|-----------|---------------|
| H301+H311 | Not available |
| H301 | Not available |

| | |
|------|--------------------------------------|
| H302 | Harmful if swallowed. |
| H311 | Not available |
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H319 | Causes serious eye irritation. |
| H330 | Not available |
| H332 | Harmful if inhaled. |
| H335 | Not available |

Precautionary Statement(s)

| Code | Statement |
|----------------|---|
| P260 | Not available |
| P261 | Avoid breathing dust/fume/gas/mist/vapours/spray. |
| P262 | Not available |
| P264 | Wash hands thoroughly after handling. |
| P264+P265 | Not available |
| P270 | Not available |
| P271 | Use only outdoors or in a well-ventilated area. |
| P272 | Not available |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection. |
| P284 | Not available |
| P301+P316 | Not available |
| P301+P317 | Not available |
| P302+P352 | IF ON SKIN: Wash with plenty of water and soap. |
| P304+P340 | IF INHALED: Remove person to fresh air and keep comfortable for breathing. |
| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present. |
| P316 | Not available |
| P317 | Not available |
| P319 | Get medical help if you feel unwell. |
| P320 | Not available |

| | |
|-----------|---|
| P321 | Specific treatment (see ... on this label). |
| P330 | Not available |
| P332+P317 | If skin irritation occurs: Get medical help. |
| P333+P317 | Not available |
| P337+P317 | If eye irritation persists: Get medical help. |
| P361+P364 | Not available |
| P362+P364 | Take off contaminated clothing and wash it before reuse. |
| P403+P233 | Store in a well-ventilated place. Keep container tightly closed. |
| P405 | Store locked up. |
| P501 | Dispose of contents/container in accordance with local/regional/national/international regulation |

SECTION 3: Composition / information on ingredients

3.1 Substance

Component : (tributylphosphoranylidene)acetonitrile

CAS Number : 157141-27-0

Molecular Formula : C₄H₉NP

Molecular Weight : 241.35

Parent Chemical : -

Synonyms : Cyanomethylenetriethylphosphorane : Tsunoda Reagent

Concentration : Not available

SECTION 4: First aid measures

SECTION 4: First-aid measures

4.1 Description of first aid measures

General advice:

- Remove contaminated clothing and shoes. Seek medical attention if symptoms persist or develop.
- Show this Safety Data Sheet to the physician in attendance.

Inhalation:

- Move person to fresh air. Keep at rest in a position comfortable for breathing.
- If breathing is difficult, seek medical attention.

Skin contact:

- Wash with plenty of soap and water.
- Seek medical attention if irritation develops.

Eye contact:

- Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do.
- Continue rinsing and obtain medical attention.

Ingestion:

- Rinse mouth. Do NOT induce vomiting.
- Never give anything by mouth to an unconscious person.
- Seek medical attention.

4.2 Most important symptoms and effects, both acute and delayed

- Not available.

4.3 Indication of any immediate medical attention and special treatment needed

- Treat symptomatically.
- Not available.

SECTION 5: Firefighting measures

SECTION 5: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media:

- Use extinguishing measures appropriate to local circumstances and the surrounding environment.
- Dry chemical, carbon dioxide (CO₂), alcohol-resistant foam, or water spray/fog.

Unsuitable extinguishing media:

- Not available.

5.2 Special hazards arising from the substance or mixture

- Combustion may produce irritating and/or toxic fumes.
- Hazardous decomposition products: Not available.

5.3 Advice for firefighters

- Wear self-contained breathing apparatus (SCBA) and full protective gear.
- Cool containers with water spray if exposed to fire.
- Prevent fire-fighting water from entering drains or watercourses.

SECTION 6: Accidental release measures

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

- Evacuate unnecessary personnel.
- Avoid breathing dust/vapors/mist.
- Use appropriate personal protective equipment (see Section 8).
- Ensure adequate ventilation.

6.2 Environmental precautions

- Avoid release to the environment.
- Prevent entry into drains, sewers, or waterways.

6.3 Methods and material for containment and cleaning up

- Contain spill.
- Collect spilled material using inert absorbent material and place in a suitable, labeled waste container.
- Clean contaminated area with appropriate methods; avoid generating dust.

6.4 Reference to other sections

- See Section 8 for personal protective equipment.
- See Section 13 for disposal considerations.

SECTION-7: Handling and storage

SECTION 7: Handling and storage

7.1 Precautions for safe handling

- Handle in accordance with good industrial hygiene and safety practice.
- Avoid contact with skin and eyes.
- Avoid breathing dust/vapors.
- Use only with adequate ventilation (e.g., fume hood).
- Keep container tightly closed when not in use.

7.2 Conditions for safe storage, including any incompatibilities

- Store in a cool, dry, well-ventilated place.
- Keep in original container, tightly closed.
- Protect from moisture.
- Incompatible materials: Not available.

7.3 Specific end use(s)

- Reagent. For laboratory and research use only.

SECTION 8: Exposure controls / personal protection

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits:

- Not available.

Biological limit values:

- Not available.

8.2 Exposure controls

Engineering controls:

- Use local exhaust ventilation or general dilution ventilation to maintain exposure below applicable limits.
- Use in a chemical fume hood where possible.

Personal protective equipment (PPE):

Eye/face protection:

- Safety glasses with side shields or chemical splash goggles.

Skin protection:

- Wear protective gloves (material selection dependent on use conditions; consult glove supplier).
- Wear lab coat or protective clothing.

Respiratory protection:

- If ventilation is inadequate, use appropriate respiratory protection in accordance with applicable regulations.

Hygiene measures:

- Wash hands thoroughly after handling.
- Do not eat, drink, or smoke when using this product.
- Remove contaminated clothing and wash before reuse.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

| Test | Result |
|-------------|-------------------|
| Appearance | Brown Liquid |
| IR spectrum | No data available |
| pH | No data available |
| Solubility | No data available |

| Property | Value |
|--|-------------------|
| a) Physical State | No data available |
| b) Color | No data available |
| c) Odor | No data available |
| d) pH | No data available |
| e) Vapour Pressure | No data available |
| f) Viscosity | No data available |
| g) Initial Boiling Point and boiling range | No data available |
| h) Melting Point / Freezing Point | No data available |
| i) Auto Ignition Temperature | No data available |
| j) Flash Point | No data available |
| k) Explosion Limit, Lower | No data available |
| l) Explosion Limit, Upper | No data available |
| m) Decomposition Temperature | No data available |
| n) Loss on Drying | No data available |
| o) Relative Density | No data available |
| p) Solubility (in DMSO) | No data available |

| Property | Value |
|-------------------------|-------------------|
| q) Oxidizing Properties | No data available |

SECTION 10: Stability and reactivity

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10.1 Reactivity

- Not available.

10.2 Chemical stability

- Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

- Not available.

10.4 Conditions to avoid

- Heat, sparks, open flames.

- Moisture (if applicable).

- Other: Not available.

10.5 Incompatible materials

- Not available.

10.6 Hazardous decomposition products

- Not available.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

- Acute toxicity: No data available.

- Skin corrosion/irritation: No data available.

- Serious eye damage/eye irritation: No data available.

- Respiratory or skin sensitization: No data available.

- Germ cell mutagenicity: No data available.

- Carcinogenicity: No data available.

- Reproductive toxicity: No data available.

- STOT-single exposure: No data available.

- STOT-repeated exposure: No data available.

- Aspiration hazard: No data available.

Likely routes of exposure

- No data available.

Symptoms related to the physical, chemical and toxicological characteristics

- Not available.

SECTION 12: Ecological information

SECTION 12: Ecological information

12.1 Toxicity

- Not available.

12.2 Persistence and degradability

- Not available.

12.3 Bioaccumulative potential

- Not available.

12.4 Mobility in soil

- Not available.

12.5 Results of PBT and vPvB assessment

- Not available.

12.6 Endocrine disrupting properties

- Not available.

12.7 Other adverse effects

- Not available.

SECTION 13: Disposal considerations

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product/unused material:

- Dispose of contents/container in accordance with local/regional/national/international regulations.
- Do not discharge to drains.

Contaminated packaging:

- Dispose of as unused product.

Waste code:

- Not available.

SECTION 14: Transport information

SECTION 14: Transport information

14.1 UN number

- Not available.

14.2 UN proper shipping name

- Not available.

14.3 Transport hazard class(es)

- Not available.

14.4 Packing group

- Not available.

14.5 Environmental hazards

- Not available.

14.6 Special precautions for user

- Not available.

14.7 Maritime transport in bulk according to IMO instruments

- Not available.

SECTION 15: Regulatory information

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

- Not available.

15.2 Chemical safety assessment

- Not available.

SECTION 16: Other information

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Product identification:

- Product name: (tributylphosphoranylidene)acetonitrile
- Synonyms: Cyanomethylenetriethylphosphorane; Tsunoda Reagent
- CAS No.: 157141-27-0
- Catalog No.: CS-DV-00429
- Supplier: Clearsynth Labs Ltd., Mumbai, India
- Emergency phone: +91-22-245045900

Revision information:

- Not available.

Disclaimer:

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