

Material Safety Data Sheet (MSDS)

Product Name: Tetra Sodium Pyrophosphate Technical Grade

MSDS Generate Date: 20-05-2017

Revision Date: 30-12-2024

Supplier:

Rawpharma Biz Pvt Ltd

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1. Product Identification

- **Chemical Name:** Tetra Sodium Pyrophosphate
- **Synonyms:** TSPP, Sodium Pyrophosphate, $\text{Na}_4\text{P}_2\text{O}_7$
- **CAS Number:** 7722-88-5
- **Molecular Formula:** $\text{Na}_4\text{P}_2\text{O}_7$
- **Molecular Weight:** 141.96 g/mol

2. Composition / Information on Ingredients

- **Chemical Composition:** $\geq 95\%$ Tetra Sodium Pyrophosphate (Technical Grade)
- **Impurities:** May contain small amounts of monosodium phosphate, disodium phosphate, and moisture.

3. Hazards Identification

- **Emergency Overview:** White crystalline powder; slightly alkaline; non-flammable; may cause irritation to eyes, skin, and respiratory tract.
 - **Potential Health Effects:**
 - Inhalation: May cause coughing, sneezing, or mild respiratory irritation.
 - Skin Contact: May cause irritation with prolonged exposure.
 - Eye Contact: Can cause severe irritation or damage.
 - Ingestion: May cause gastrointestinal discomfort.
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4. First Aid Measures

- **Inhalation:** Move to fresh air. Seek medical attention if symptoms persist.
 - **Skin Contact:** Wash affected area with soap and water. Remove contaminated clothing.
 - **Eye Contact:** Rinse immediately with plenty of water for at least 15 minutes. Seek medical attention.
 - **Ingestion:** Rinse mouth thoroughly. Do not induce vomiting. Seek medical advice if discomfort occurs.
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5. Fire-Fighting Measures

- **Flammability:** Non-flammable
 - **Extinguishing Media:** Use water spray, foam, dry chemical, or CO₂ extinguisher if nearby fire occurs.
 - **Special Hazards:** None known
 - **Protective Equipment for Firefighters:** Wear self-contained breathing apparatus and protective clothing.
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6. Accidental Release Measures

- **Personal Precautions:** Avoid dust formation. Use gloves, goggles, and mask.
- **Environmental Precautions:** Prevent from entering water sources.
- **Cleanup Methods:** Sweep or vacuum carefully; avoid creating dust; dispose according to local regulations.

7. Handling and Storage

- **Handling:** Avoid inhalation of dust, contact with eyes and skin. Use appropriate protective equipment.
- **Storage:** Store in a cool, dry, well-ventilated area away from acids and moisture. Keep container tightly closed.

8. Exposure Controls / Personal Protection

- **Occupational Exposure Limits:** Not established (follow general dust limits).
- **Engineering Controls:** Use adequate ventilation.
- **Personal Protective Equipment:**
 - Respiratory: Dust mask
 - Hands: Protective gloves
 - Eyes: Safety goggles
 - Skin: Protective clothing

9. Physical and Chemical Properties

- **Appearance:** White crystalline powder
- **Odor:** Odorless
- **pH (10% solution):** 9–10
- **Melting Point:** 988 °C (decomposes)
- **Solubility:** Soluble in water; insoluble in alcohol
- **Density:** 2.54 g/cm³

10. Stability and Reactivity

- **Chemical Stability:** Stable under normal conditions
- **Conditions to Avoid:** Moisture, acids, high temperatures
- **Incompatible Materials:** Strong acids, aluminum, magnesium

- **Hazardous Decomposition Products:** Phosphorus oxides at high temperatures
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11. Toxicological Information

- **Acute Toxicity:** Low toxicity
 - **Chronic Effects:** Prolonged exposure may irritate skin and mucous membranes
 - **Routes of Exposure:** Inhalation, ingestion, eye/skin contact
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12. Ecological Information

- **Environmental Fate:** May increase water alkalinity; avoid contamination of aquatic systems
 - **Ecotoxicity:** Low toxicity to aquatic life in small concentrations
 - **Persistence and Degradability:** Inorganic substance; does not biodegrade
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13. Disposal Considerations

- **Waste Disposal:** Dispose of according to local, regional, and national regulations. Avoid release into the environment.
 - **Container Disposal:** Empty containers should be cleaned and disposed safely.
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14. Transport Information (Detailed)

- **UN Number:** 3089 (if classified as hazardous for transport)
- **UN Proper Shipping Name:** Sodium phosphates, solid, n.o.s.
- **Transport Hazard Class:** 9 (Miscellaneous dangerous substances and articles)
- **Packing Group:** III
- **Transport Precautions:**
 - Avoid moisture during transport.
 - Keep containers tightly closed.
 - Protect from physical damage.
 - Avoid transport with strong acids or reactive materials.

- **Road Transport (ADR/RID):** Not restricted; follow normal safety precautions.
 - **Air Transport (IATA/ICAO):** Non-flammable, but package according to IATA Dangerous Goods Regulations.
 - **Sea Transport (IMDG):** Non-flammable; handle as miscellaneous substance; avoid discharge to water.
 - **Labeling:** Handle with care; indicate "Irritant" and "Non-flammable Solid" if required by local regulations.
 - **Emergency Response:** Use standard spill containment and clean-up procedures during transport incidents.
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15. Regulatory Information

- **Indian Regulations:** Compliant with Indian Chemical Safety Guidelines
 - **International Regulations:** TSCA, REACH (if applicable)
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16. Other Information

- **References:** Supplier information, chemical databases
- **Disclaimer:** Information given is based on current knowledge. Users must ensure suitability for their own conditions and comply with local regulations.
- **MSDS Generate Date:** 20-05-2017
- **Revision Date:** 30-12-2024
- **Website:** www.rawpharmabiz.com
- MSDS are based on the manufacturer's provided information.