

# Tetra Potassium Pyrophosphate MSDS

## Section 1 - Product Name and Identification

**Product Name:** [Tetra Potassium Pyrophosphate](#)

**Synonyms:** TKPP, Diphosphoric Acid, Tetrapotassium Salt

**CAS Number:** 7320-34-5

**Chemical Formula:** K<sub>4</sub>P<sub>2</sub>O<sub>7</sub>

**Manufactured by:** [Insert Company Name]

### Emergency Contact Information:

- Phone Number: [Insert Phone Number]
- Email Address: [Insert Email Address]

## Section 2 - Composition/Ingredients

**Chemical Name:** Tetra Potassium Pyrophosphate

- **CAS Number:** 7320-34-5
- **Concentration:** ≥ 98%

## Section 3 - Hazards Identification

**Classification:** Non-hazardous under GHS classification criteria.

### Potential Health Effects:

- **Eyes:** May cause mild irritation upon contact.
- **Skin:** Prolonged exposure may lead to mild irritation.
- **Inhalation:** May cause respiratory discomfort if large amounts are inhaled.
- **Ingestion:** May cause irritation to the digestive tract in large quantities.

**Hazard Statements:** None significant under normal use conditions.

**Precautionary Statements:**

- Avoid direct contact with eyes and prolonged skin exposure.
- Wash hands thoroughly after handling.

**Section 4 - First Aid Measures**

**Eyes:** Rinse thoroughly with water for at least 15 minutes. If irritation persists, seek medical advice.

**Skin:** Wash exposed area with soap and water. Remove contaminated clothing. If irritation develops, seek medical attention.

**Inhalation:** Move to fresh air. If respiratory symptoms occur, seek medical attention.

**Ingestion:** Rinse mouth with water and drink small quantities of water. Do not induce vomiting. Seek medical attention if symptoms arise.

**Section 5 - Handling and Storage****Handling:**

- Use appropriate protective equipment to avoid skin and eye contact.
- Avoid generating dust.

**Storage:**

- Store in a cool, dry, and well-ventilated area.
- Keep containers tightly closed to avoid contamination.
- Store away from incompatible materials like strong acids.

**Section 6 - Exposure Controls/Personal Protection**

**Exposure Limits:** None established.

**Engineering Controls:** Provide adequate ventilation to maintain airborne concentrations below recommended limits.

**Personal Protective Equipment (PPE):**

- **Eye Protection:** Safety goggles.

- **Skin Protection:** Protective gloves and clothing.
- **Respiratory Protection:** Dust mask in case of inadequate ventilation.

## Section 7 - Physical and Chemical Properties

**Physical State:** Solid (crystalline powder)

**Color:** White

**Odor:** Odorless

**Solubility in Water:** Soluble

**pH (1% Solution):** Approximately 10.0-10.5

**Melting Point:** Decomposes before melting

**Boiling Point:** Not applicable

**Density:** 2.33 g/cm<sup>3</sup>

## Section 8 - Stability and Reactivity

**Stability:** Stable under normal storage and handling conditions.

**Conditions to Avoid:** Moisture, excessive heat, and contact with incompatible materials.

**Materials to Avoid:** Acids, oxidizing agents.

**Hazardous Decomposition Products:** Phosphorus oxides, potassium oxides in the case of thermal decomposition.

## Section 9 - Toxicological Information

**Acute Toxicity:**

- Oral LD50 (rat): >2000 mg/kg (low toxicity)

**Eye Irritation:** May cause slight irritation.

**Skin Irritation:** Non-irritant under normal use.

**Chronic Effects:** No known significant effects.

**Sensitization:** Not a sensitizer.

## **Section 10 - Disposal Considerations**

### **Waste Disposal Method:**

- Dispose of in accordance with local, regional, national, and international regulations.
- Avoid release into the environmental waterways.

### **Packaging:**

- Containers should be recycled or disposed of in accordance with regulatory requirements.

**Note:** It is the responsibility of the waste generator to evaluate the waste and comply with applicable laws and regulations.

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