# Safety Data Sheet
# Tetrapotassium Pyrophosphate, TKPP
# Revision 6, 22/08/2024

## 1. IDENTIFICATION

| | |
|---|---|
| **Product Name** | **Tetrapotassium Pyrophosphate** |
| **Other Names** | Potassium pyrophosphate; Tetrapotassium diphosphate; TKPP |
| **Uses** | Food additive; emulsifier; modifier; chelating agent. |
| **Chemical Family** | No Data Available |
| **Chemical Formula** | K4P2O7 |
| **Chemical Name** | Diphosphoric acid, tetrapotassium salt |
| **Product Description** | No Data Available |

### Contact Details of the Supplier of this Safety Data Sheet

| Organisation | Location | Telephone |
|---|---|---|
| Aurora Cleaning Supplies | F1 / 5 Bungaleen Court<br>Dandenong South<br>VIC 3175 | 03 9768 2669 |

### Emergency Contact Details

*For emergencies only; DO NOT contact these companies for general product advice.*

| Organisation | Location | Telephone |
|---|---|---|
| Chemcall | Australia | 1800-127406<br>+64-4-9179888 |
| Chemcall | Malaysia | +64-4-9179888 |
| Chemcall | New Zealand | 0800-243622<br>+64-4-9179888 |
| National Poisons Centre | New Zealand | 0800-764766 |
| CHEMTREC | USA & Canada | 1-800-424-9300 CN723420<br>+1-703-527-3887 |

## 2. HAZARD IDENTIFICATION

**Poisons Schedule (Aust)** Not Scheduled

### Globally Harmonised System

| | | | |
|---|---|---|---|
| **Hazard Classification** | | Hazardous according to the criteria of the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) | |
| **Hazard Categories** | | Serious Eye Damage/Irritation - Category 2A | |
| **Pictograms** | |  | |
| **Signal Word** | | Warning | |
| **Hazard Statements** | | **H319** | Causes serious eye irritation. |
| **Precautionary Statements** | Prevention | **P280** | Wear eye protection/face protection. |
| | Response | **P305 + P351 + P338** | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| | | **P337 + P313** | If eye irritation persists: Get medical advice/attention. |

### National Transport Commission (Australia)
Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

| | |
|---|---|
| **Dangerous Goods Classification** | NOT Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code) |

### Environmental Protection Authority (New Zealand)
Hazardous Substances and New Organisms Amendment Act 2015

| | | | |
|---|---|---|---|
| **HSNO Classifications** | Health Hazards | **6.4A** | Substances that are irritating to the eye |

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

***Ingredients***

| Chemical Entity | Formula | CAS Number | Proportion |
|---|---|---|---|
| Tetrapotassium pyrophosphate | K4P2O7 | 7320-34-5 | <=100 % |

## 4. FIRST AID MEASURES

***Description of necessary measures according to routes of exposure***

| | |
|---|---|
| **Swallowed** | IF SWALLOWED: Rinse mouth, then drink 1 - 2 glasses of water. Do not induce vomiting. Get immediate medical advice/attention. If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain an open airway and prevent aspiration. Do not leave victim unattended. Never give anything by mouth to an unconscious person. |
| **Eye** | IF IN EYES: Immediately flush eyes with running water for several minutes, holding eyelids open and occasionally lifting the upper and lower lids. Remove contact lenses if present and easy to do. Continue rinsing for at least 15 minutes. Get immediate medical advice/attention, preferably with an ophthalmologist. |
| **Skin** | IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash before reuse. If skin irritation occurs, get medical advice/attention. |
| **Inhaled** | IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If respiratory symptoms persist, get medical advice/attention. Apply resuscitation if victim is not breathing - Administer oxygen if breathing is difficult. |
| | Treat symptomatically. Consideration should be given to the possibility that overexposure to materials other than this |

| | |
|---|---|
| **Advice to Doctor** | product may have occurred. Ensure that attending medical personnel are aware of the identity and nature of the product(s) involved, and take precautions to protect themselves. |
| **Medical Conditions Aggravated by Exposure** | No information available. |

## 5. FIRE FIGHTING MEASURES

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|---|---|
| **General Measures** | If safe to do so, move undamaged containers from fire area. Cool containers with water spray until well after fire is out. |
| **Flammability Conditions** | Non-combustible material. |
| **Extinguishing Media** | If material is involved in a fire, use extinguishing measures that are appropriate to local circumstances and the surrounding environment - Do not scatter spilled material with high pressure water streams. |
| **Fire and Explosion Hazard** | Decomposes on heating, emitting toxic fumes. |
| **Hazardous Products of Combustion** | Fire or heat may produce irritating, toxic and/or corrosive fumes, including oxides of Phosphorus and Potassium oxides. |
| **Special Fire Fighting Instructions** | Contain runoff from fire control or dilution water - Runoff may pollute waterways. |
| **Personal Protective Equipment** | Wear self-contained breathing apparatus (SCBA) and chemical splash suit. SCBA and structural firefighter's uniform may provide limited protection. |
| **Flash Point** | No Data Available |
| **Lower Explosion Limit** | No Data Available |
| **Upper Explosion Limit** | No Data Available |
| **Auto Ignition Temperature** | No Data Available |
| **Hazchem Code** | No Data Available |

## 6. ACCIDENTAL RELEASE MEASURES

| | |
|---|---|
| **General Response Procedure** | Ensure adequate ventilation. Do not touch or walk through spilled material. Avoid generating dust. Avoid breathing dust and contact with eyes, skin and clothing. |
| **Clean Up Procedures** | Collect material (sweep or vacuum up) and seal in properly labelled containers for disposal (see SECTION 13). |
| **Containment** | Stop leak if safe to do so – Prevent entry into waterways, drains or confined areas. Cover with damp absorbent or a plastic sheet to minimise spreading. |
| **Decontamination** | Wash area down with excess water. |
| **Environmental Precautionary Measures** | Prevent entry into drains and waterways. If contamination of sewers or waterways has occurred advise local emergency services. |
| **Evacuation Criteria** | Spill or leak area should be isolated immediately. Keep unauthorised personnel away. |
| **Personal Precautionary Measures** | Use personal protective equipment as required (see SECTION 8). |

## 7. HANDLING AND STORAGE

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|---|---|
| **Handling** | Safety showers and eyewash facilities should be provided within the immediate work area for emergency use. Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Minimise dust generation and accumulation. Avoid breathing dust and contact with eyes, skin and clothing. Do not ingest. Use personal protective equipment as required (see SECTION 8). |
| **Storage** | Store in a cool, dry and well-ventilated place, out of direct sunlight. Keep container tightly closed when not in use - check regularly for spills. Hygroscopic: Avoid exposure to moisture. Keep away from heat and sources of ignition - No smoking. Keep away from incompatible materials (see SECTION 10). |
| **Container** | Keep in the original container. |

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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|---|---|
| **General** | No specific exposure standards are available for this product. For dusts from solid substances without specific occupational exposure standards:<br>- Safe Work Australia Exposure Standard (Nuisance dusts): 8 hr TWA = 10 mg/m3 (measured as inhalable dust).<br>- New Zealand WES (Particulates not otherwise classified): TWA = 10 mg/m3; TWA = 3 mg/m3 (respirable dust). |
| **Exposure Limits** | No Data Available |
| **Biological Limits** | No information available. |
| **Engineering Measures** | A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. |
| **Personal Protection Equipment** | - Respiratory protection: In case of inadequate ventilation, wear respiratory protection. Recommended: Dust mask/particulate filter respirator (refer to AS/NZS 1715 & 1716).<br>- Eye/face protection: Wear appropriate eye protection to avoid eye contact. Recommended: Safety glasses.<br>- Hand protection: Handle with gloves. Recommended: Impervious gloves.<br>- Skin/body protection: Wear appropriate personal protective clothing to avoid skin contact. Recommended: Overalls, safety shoes. |
| **Special Hazards Precaustions** | No information available. |
| **Work Hygienic Practices** | Do not eat, drink or smoke when using this product. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. |

## 9. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|---|---|
| **Physical State** | Solid |
| **Appearance** | Crystals, powder or granular |
| **Odour** | Odourless |
| **Colour** | Colourless or white |
| **pH** | 10.0 - 10.8 (1% sol'n) |
| **Vapour Pressure** | No Data Available |
| **Relative Vapour Density** | No Data Available |
| **Boiling Point** | No Data Available |
| **Melting Point** | No Data Available |
| **Freezing Point** | No Data Available |
| **Solubility** | Soluble in water |
| **Specific Gravity** | No Data Available |
| **Flash Point** | No Data Available |
| **Auto Ignition Temp** | No Data Available |
| **Evaporation Rate** | No Data Available |
| **Bulk Density** | No Data Available |
| **Corrosion Rate** | No Data Available |
| **Decomposition Temperature** | No Data Available |
| **Density** | No Data Available |
| **Specific Heat** | No Data Available |
| **Molecular Weight** | No Data Available |
| **Net Propellant Weight** | No Data Available |
| **Octanol Water Coefficient** | No Data Available |
| **Particle Size** | No Data Available |
| **Partition Coefficient** | No Data Available |
| **Saturated Vapour Concentration** | No Data Available |
| **Vapour Temperature** | No Data Available |
| **Viscosity** | No Data Available |

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|---|---|
| **Volatile Percent** | No Data Available |
| **VOC Volume** | No Data Available |
| **Additional Characteristics** | No information available. |
| **Potential for Dust Explosion** | No information available. |
| **Fast or Intensely Burning Characteristics** | No information available. |
| **Flame Propagation or Burning Rate of Solid Materials** | No information available. |
| **Non-Flammables That Could Contribute Unusual Hazards to a Fire** | No information available. |
| **Properties That May Initiate or Contribute to Fire Intensity** | Non-combustible material. |
| **Reactions That Release Gases or Vapours** | Decomposes on heating, emitting toxic fumes. including oxides of Phosphorus and Potassium oxides. |
| **Release of Invisible Flammable Vapours and Gases** | Phosphates are susceptible to formation of highly toxic and flammable phosphine gas in the presence of strong reducing agents such as hydrides. |

## 10. STABILITY AND REACTIVITY

| | |
|---|---|
| **General Information** | Phosphates are susceptible to formation of highly toxic and flammable phosphine gas in the presence of strong reducing agents such as hydrides. |
| **Chemical Stability** | Stable under normal temperatures and pressures. |
| **Conditions to Avoid** | Avoid generating dust. Avoid exposure to moisture. |
| **Materials to Avoid** | Incompatible/reactive with oxidising agents and reducing agents. |
| **Hazardous Decomposition Products** | Decomposes on heating, emitting toxic fumes. including oxides of Phosphorus and Potassium oxides. |
| **Hazardous Polymerisation** | Hazardous polymerisation will not occur. |

## 11. TOXICOLOGICAL INFORMATION

**General Information**

- Acute toxicity: May be harmful if swallowed. Swallowing may result in irritation of the gastrointestinal tract; may cause burns to the mouth and esophagus, nausea, vomiting and diarrhoea.
- Skin corrosion/irritation: Contact with skin may result in irritation.
- Eye damage/irritation: Causes serious eye irritation.
- Respiratory/skin sensitisation: No information available.
- Germ cell mutagenicity: No information available.
- Carcinogenicity: Not listed as carcinogenic according to the International Agency for Research on Cancer (IARC).
- Reproductive toxicity: No information available.
- STOT (single exposure): Breathing in dust may result in respiratory irritation.
- STOT (repeated exposure): No information available.
- Aspiration toxicity: No information available.

***Acute***

**Ingestion**

Acute toxicity (Oral):
- LD50, Rats (male/female): >2,000 mg/kg bw. [weight of evidence; ECHA].

**Carcinogen Category** None

## 12. ECOLOGICAL INFORMATION

| | |
|---|---|
| **Ecotoxicity** | No information available. |
| **Persistence/Degradability** | While the alkalinity of this material is readily reduced in natural waters, the resulting phosphate may persist indefinitely or incorporate into biological systems. |

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|---|---|
| **Mobility** | No information available. |
| **Environmental Fate** | Prevent entry into drains and waterways. |
| **Bioaccumulation Potential** | No information available. |
| **Environmental Impact** | No Data Available |

## 13. DISPOSAL CONSIDERATIONS

| | |
|---|---|
| **General Information** | Dispose of contents/container in accordance with local/regional/national regulations. |
| **Special Precautions for Land Fill** | Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself. |

## 14. TRANSPORT INFORMATION

### Land Transport (Australia)
ADG Code

| | |
|---|---|
| **Proper Shipping Name** | Tetrapotassium Pyrophosphate |
| **Class** | No Data Available |
| **Subsidiary Risk(s)** | No Data Available |
| | No Data Available |
| **UN Number** | No Data Available |
| **Hazchem** | No Data Available |
| **Pack Group** | No Data Available |
| **Special Provision** | No Data Available |
| **Comments** | NON-DANGEROUS GOODS: Not regulated for LAND transport. |

### Land Transport (Malaysia)
ADR Code

| | |
|---|---|
| **Proper Shipping Name** | Tetrapotassium Pyrophosphate |
| **Class** | No Data Available |
| **Subsidiary Risk(s)** | No Data Available |
| | No Data Available |
| **UN Number** | No Data Available |
| **Hazchem** | No Data Available |
| **Pack Group** | No Data Available |
| **Special Provision** | No Data Available |
| **Comments** | NON-DANGEROUS GOODS: Not regulated for LAND transport. |

### Land Transport (New Zealand)
NZS5433

| | |
|---|---|
| **Proper Shipping Name** | Tetrapotassium Pyrophosphate |
| **Class** | No Data Available |
| **Subsidiary Risk(s)** | No Data Available |
| | No Data Available |
| **UN Number** | No Data Available |
| **Hazchem** | No Data Available |

| | |
|---|---|
| **Pack Group** | No Data Available |
| **Special Provision** | No Data Available |
| **Comments** | NON-DANGEROUS GOODS: Not regulated for LAND transport. |

### Land Transport (United States of America)
US DOT

| | |
|---|---|
| **Proper Shipping Name** | Tetrapotassium Pyrophosphate |
| **Class** | No Data Available |
| **Subsidiary Risk(s)** | No Data Available |
| | No Data Available |
| **UN Number** | No Data Available |
| **Hazchem** | No Data Available |
| **Pack Group** | No Data Available |
| **Special Provision** | No Data Available |
| **Comments** | NON-DANGEROUS GOODS: Not regulated for LAND transport. |

### Sea Transport
IMDG Code

| | |
|---|---|
| **Proper Shipping Name** | Tetrapotassium Pyrophosphate |
| **Class** | No Data Available |
| **Subsidiary Risk(s)** | No Data Available |
| **UN Number** | No Data Available |
| **Hazchem** | No Data Available |
| **Pack Group** | No Data Available |
| **Special Provision** | No Data Available |
| **EMS** | No Data Available |
| **Marine Pollutant** | No |
| **Comments** | NON-DANGEROUS GOODS: Not regulated for SEA transport. |

### Air Transport
IATA DGR

| | |
|---|---|
| **Proper Shipping Name** | Tetrapotassium Pyrophosphate |
| **Class** | No Data Available |
| **Subsidiary Risk(s)** | No Data Available |
| **UN Number** | No Data Available |
| **Hazchem** | No Data Available |
| **Pack Group** | No Data Available |
| **Special Provision** | No Data Available |
| **Comments** | NON-DANGEROUS GOODS: Not regulated for AIR transport. |

### National Transport Commission (Australia)
Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

| | |
|---|---|
| **Dangerous Goods Classification** | NOT Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code) |

## 15. REGULATORY INFORMATION

| | |
|---|---|
| **General Information** | No Data Available |
| **Poisons Schedule (Aust)** | Not Scheduled |

### Environmental Protection Authority (New Zealand)

Hazardous Substances and New Organisms Amendment Act 2015

| | |
|---|---|
| **Approval Code** | HSR002578 |

### National/Regional Inventories

| | |
|---|---|
| **Australia (AIIC)** | Listed |
| **Canada (DSL)** | Listed |
| **Canada (NDSL)** | Not Determined |
| **China (IECSC)** | Listed |
| **Europe (EINECS)** | 230-785-7 |
| **Europe (REACh)** | Not Determined |
| **Japan (ENCS/METI)** | Listed |
| **Korea (KECI)** | Listed |
| **Malaysia (EHS Register)** | Not Determined |
| **New Zealand (NZIoC)** | Listed |
| **Philippines (PICCS)** | Listed |
| **Switzerland (Giftliste 1)** | Not Determined |
| **Switzerland (Inventory of Notified Substances)** | Not Determined |
| **Taiwan (NCSR)** | Not Determined |
| **USA (TSCA)** | Not Determined |

## 16. OTHER INFORMATION

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|---|---|
| **Related Product Codes** | POPYRF1000, POPYRF1001, POPYRF1002, POPYRF1100, POPYRF1101, POPYRF1500, POPYRF2000, POPYRF2100, POPYRF2400, POPYRF2500, POPYRF3000, POPYRF3300, POPYRF3500, POPYRF3700, POPYRF4000, POPYRF4500, POPYRF5000, POPYRF5100, POPYRF5101, POPYRF5200, POPYRF5201, POPYRF6000, POPYRF6010, POPYRF6100, POPYRF6110, POPYRF7000, POPYRF7100, POPYRF7200, POPYRF7240, POPYRF7300, POPYRF7500, POPYRF8000, POPYRF8100, POPYRF8101, POPYRF8102, POPYRO1000, POPYRO1001, POPYRO1002, POPYRO1003, POPYRO1004, POPYRO1005, POPYRO1006, POPYRO1007, POPYRO1008, POPYRO1009, POPYRO1010, POPYRO1011, POPYRO1012, POPYRO1013, POPYRO1014, POPYRO1015, POPYRO1016, POPYRO1600, POPYRO1601, POPYRO1602, POPYRO1603, POPYRO1604, POPYRO1605, POPYRO1606, POPYRO1607, POPYRO1800, POPYRO1801, POPYRO1802, POPYRO1803, POPYRO1804, POPYRO1805, POPYRO1806, POPYRO1807, POPYRO1808, POPYRO1809, POPYRO1810, POPYRO1811, POPYRO1812, POPYRO1813, POPYRO1814, POPYRO2000, POPYRO2001, POPYRO2002, POPYRO2500, POPYRO3000, POPYRO3001, POPYRO3002, POPYRO3003, POPYRO3004, POPYRO3005, POPYRO3007, POPYRO3010, POPYRO3300, POPYRO3302, POPYRO3310, POPYRO3400, POPYRO3405, POPYRO3500, POPYRO4000, POPYRO4001, POPYRO4002, POPYRO4500, POPYRO5000, POPYRO6000, POPYRO6100, POPYRO6200, POPYRO6500, POPYRO7000, POPYRO8000, POPYRO8100, POPYRO9000 |
| **Revision** | 6 |

| | |
|---|---|
| **Revision Date** | 22/08/2024 |
| **Reason for Issue** | Updated SDS |
| **Key/Legend** | **<** Less Than<br>**>** Greater Than<br>**AICS** Australian Inventory of Chemical Substances<br>**atm** Atmosphere<br>**CAS** Chemical Abstracts Service (Registry Number)<br>**cm²** Square Centimetres<br>**CO2** Carbon Dioxide<br>**COD** Chemical Oxygen Demand<br>**deg C (°C)** Degrees Celcius<br>**EPA (New Zealand)** Environmental Protection Authority of New Zealand<br>**deg F (°F)** Degrees Farenheit<br>**g** Grams<br>**g/cm³** Grams per Cubic Centimetre<br>**g/l** Grams per Litre<br>**HSNO** Hazardous Substance and New Organism<br>**IDLH** Immediately Dangerous to Life and Health<br>**immiscible** Liquids are insoluable in each other.<br>**inHg** Inch of Mercury<br>**inH2O** Inch of Water<br>**K** Kelvin<br>**kg** Kilogram<br>**kg/m³** Kilograms per Cubic Metre<br>**lb** Pound<br>**LC50** LC stands for lethal concentration. LC50 is the concentration of a material in air which causes the death of 50% (one half) of a group of test animals. The material is inhaled over a set period of time, usually 1 or 4 hours.<br>**LD50** LD stands for Lethal Dose. LD50 is the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals.<br>**ltr** or **L** Litre<br>**m³** Cubic Metre<br>**mbar** Millibar<br>**mg** Milligram<br>**mg/24H** Milligrams per 24 Hours<br>**mg/kg** Milligrams per Kilogram<br>**mg/m³** Milligrams per Cubic Metre<br>**Misc** or **Miscible** Liquids form one homogeneous liquid phase regardless of the amount of either component present.<br>**mm** Millimetre<br>**mmH2O** Millimetres of Water<br>**mPa.s** Millipascals per Second<br>**N/A** Not Applicable<br>**NIOSH** National Institute for Occupational Safety and Health<br>**NOHSC** National Occupational Heath and Safety Commission<br>**OECD** Organisation for Economic Co-operation and Development<br>**Oz** Ounce<br>**PEL** Permissible Exposure Limit<br>**Pa** Pascal<br>**ppb** Parts per Billion<br>**ppm** Parts per Million<br>**ppm/2h** Parts per Million per 2 Hours<br>**ppm/6h** Parts per Million per 6 Hours<br>**psi** Pounds per Square Inch<br>**R** Rankine<br>**RCP** Reciprocal Calculation Procedure<br>**STEL** Short Term Exposure Limit<br>**TLV** Threshold Limit Value<br>**tne** Tonne<br>**TWA** Time Weighted Average<br>**ug/24H** Micrograms per 24 Hours<br>**UN** United Nations<br>**wt** Weight |