

SECTION 1. PRODUCT IDENTIFICATION

1.1 TRADE NAME (AS LABELED):

Tetrapotassium Pyrophosphate

SYNONYMS:

Pyrophosphoric Acid, Tetrapotassium Salt; TKPP

CAS#:

7320-34-5

EC NUMBER:

230-785-7

REACH REGISTRATION #:

01-2119489369-18-0007

1.2 PRODUCT USE:

Excellent sequestrant for iron in food products. Excellent protein modifier for meat. Recommended for use in low sodium meats; Highly soluble in aqueous solutions. Excellent deflocculating/dispersion properties

1.3 MANUFACTURER'S NAME:

Innophos, Inc.

ADDRESS:

259 Prospect Plains Rd. Bldg A, Cranbury, NJ 08512

BUSINESS PHONE:

1-609-495-2495

WEB SITE INFORMATION:

www.innophos.com

RESPONSIBLE PARTY - EU

Labcorp Development S.A.U.

Parque Empresarial Las Tablas

Edificio 1

Calle Federico Mompou

5-5ª planta

28050 Madrid, Spain

Tel: +34 915 901 664

Email: or-eu@labcorp.com

1.4 EMERGENCY PHONE NUMBERS:

800-424-9300 (CHEMTREC U.S. and Canada – 24 Hrs)

+1 703-527-3887 (CHEMTREC outside the USA and Canada – 24 Hrs)

615-386-7816 – Innophos Emergency Communication Team (ECT)

01-800-00214 00 (SETIQ in Mexico – 24 hrs)

DATE OF PRIOR REVISION:

April 5, 2020

DATE OF LATEST REVISION:

February 3, 2023

SECTION 2. HAZARD IDENTIFICATION

EMERGENCY OVERVIEW: This product is a white fine granular with no odor.

Health Hazards: May cause irritation with direct contact to the eyes and skin.

Flammability Hazards: This product is non-flammable.

Reactivity Hazards: None.

Environmental Hazards: No data available.

2.1 GHS LABELING AND CLASSIFICATION:

This product does meet the definition of a hazardous substance or preparation as defined by 29 CFR 1910. 1200 and regulation (EU) No. 2020/878 and regulation (EC) No. 1272/2008.

Index Number:

EC# 230-785-7 is not listed in Annex VI

Substances not listed either individually or in group entries must be self-classified.

Component(s) Contributing to Classification(s)

Diphosphoric acid, potassium salt (1:4)

2.2 LABEL ELEMENTS

EUROPEAN and (GHS) Hazard Symbol(s)



Signal Word: **Warning!**

GHS Hazard Classification(s):

Skin Irritation Category 2

Eye Irritation Category 2A

Hazard Statement(s):

H315: Causes skin irritation

H319: Causes serious eye irritation

Prevention Statement(s):

P264: Wash thoroughly after handling.

P280: Use protective gloves/protective clothing/eye protection/face protection.

Response Statement(s):

P302 + P352: IF ON SKIN: Wash with plenty of water.

P321: Specific treatment (See Section 4 of this SDS).

P332+P313: If skin irritation occurs: Get medical advice / attention.

P362 + P364: Take off contaminated clothing and wash it before reuse.

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.

Storage Statement(s):

None applicable

Disposal Statement(s):

P501: Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 OTHER HAZARDS:

Endocrine Disruptor Information: This product does not contain chemicals on the Candidate List of substances of very high concern for Authorisation.

SECTION 3. COMPOSITION AND INFORMATION ON INGREDIENTS

| Hazardous Ingredients: | WT% | CAS# | EINECS # | Hazard Classification |
|---|------|-----------|-----------|--|
| Diphosphoric acid, potassium salt (1:4) | >95% | 7320-34-5 | 230-785-7 | Skin Irritation Cat 2, Eye Irritation Cat 2A |
| Balance of other ingredients are non-hazardous or below the applicable cut-off. | | | | |

4. FIRST-AID MEASURES

4.1 DESCRIPTION OF FIRST AID MEASURES:**EYE CONTACT:** If product enters the eyes, open eyes while under gentle running water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing for at least 15 minutes. Seek medical attention.**SKIN CONTACT:** Wash skin thoroughly after handling. Seek medical attention if irritation develops and persists. Remove contaminated clothing. Launder before re-use.**INHALATION:** If breathing becomes difficult, remove victim to fresh air. If necessary, use artificial respiration to support vital functions. Seek medical attention.**INGESTION:** If product is swallowed, call physician or poison control center for most current information. If professional advice is not available, do not induce vomiting. Never induce vomiting or give diluents (milk or water) to someone who is unconscious, having convulsions, or who cannot swallow. Seek medical advice. Take a copy of the label and/or SDS with the victim to the health professional.**MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:** Pre-existing skin, respiratory system or eye problems may be aggravated.**4.2 SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED:**

Contact with skin and eyes may cause irritation.

4.3 RECOMMENDATIONS TO PHYSICIANS:

Treat symptoms and eliminate overexposure.

SECTION 5. FIRE-FIGHTING MEASURES

5.1 FIRE EXTINGUISHING MATERIALS:

Use fire extinguishing methods below:

| | | | |
|--------------|-----|-----------------|---------------|
| Water Spray: | Yes | Carbon Dioxide: | Yes |
| Foam: | Yes | Dry Chemical: | Yes |
| Halon: | Yes | Other: | Any "C" Class |

5.2 UNUSUAL FIRE AND EXPLOSION HAZARDS:

Avoid dusting situations.

Explosion Sensitivity to Mechanical Impact: No

Explosion Sensitivity to Static Discharge: No

5.3 SPECIAL FIRE-FIGHTING PROCEDURES:

Incipient fire responders should wear eye protection. Structural firefighters must wear Self-Contained Breathing Apparatus and full protective equipment. Isolate materials not yet involved in the fire and protect personnel. Move containers from fire area if this can be done without risk; otherwise, cool with carefully applied water spray. If possible, prevent runoff water from entering storm drains, bodies of water, or other environmentally sensitive areas.

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES:

To prevent skin and eye contact under the foreseeable conditions of use, wear appropriate protective clothing and safety eyewear. When handling, do not eat, drink, or smoke. Wash thoroughly after handling. Handle in a well-ventilated work area.

6.2 ENVIRONMENTAL PRECAUTIONS:

If possible, prevent entry to sewers, storm drains, surface waters, and soils.

6.3 SPILL AND LEAK RESPONSE:

Spilled product should be removed immediately to avoid formation of dust. Remove by mechanical means (i.e. vacuuming). Dilute remainder with plenty of water (avoid formation of aerosols). Ensure sufficient ventilation. Wash contaminated clothing.

SECTION 7. HANDLING and STORAGE

7.1 PRECAUTIONS FOR SAFE HANDLING:

To prevent skin and eye contact under the foreseeable conditions of use, wear appropriate protective clothing and safety eyewear. When handling, do not eat, drink, or smoke. Wash thoroughly after handling. Handle in a well-ventilated work area.

7.2 STORAGE AND HANDLING PRACTICES:

Keep away from incompatible materials. Keep in a dry, well-ventilated area in closed containers. Protect containers from physical damage.

7.3 SPECIFIC USES:

See Section 1.2.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 EXPOSURE PARAMETERS:

| Chemical Name | CAS# | ACGIH TLV | OSHA TWA | EH40 TWA |
|---|-----------|------------|------------|------------|
| Diphosphoric acid, potassium salt (1:4) | 7320-34-5 | Not Listed | Not Listed | Not Listed |

PARTICULATES NOT OTHERWISE REGULATED RESPIRABLE FRACTION

| | | | |
|------|--------------------------------|-------------------|--------------------------------|
| OSHA | $\frac{TWA}{5 \text{ mg/m}^3}$ | NOM 010 STPS 2015 | $\frac{TWA}{3 \text{ mg/m}^3}$ |
|------|--------------------------------|-------------------|--------------------------------|

PARTICULATES NOT OTHERWISE REGULATED TOTAL DUST

| | | | |
|------|---------------------------------|-------------------|---------------------------------|
| OSHA | $\frac{TWA}{15 \text{ mg/m}^3}$ | NOM 010 STPS 2015 | $\frac{TWA}{10 \text{ mg/m}^3}$ |
|------|---------------------------------|-------------------|---------------------------------|

8.2 EXPOSURE CONTROLS:

VENTILATION AND ENGINEERING CONTROLS: Use with adequate ventilation to ensure exposure levels are maintained below the limits provided above.

The following information on appropriate Personal Protective Equipment is provided to assist employers in complying with OSHA regulations found in 29 CFR Subpart I (beginning at 1910.132) or equivalent standard of Canada, or standards of EU member states (including EN 149 for respiratory PPE, and EN 166 for face/eye protection), and those of Japan. Please reference applicable regulations and standards for relevant details.

RESPIRATORY PROTECTION: Not required for properly ventilated areas. Maintain airborne contaminant concentrations below guidelines listed above, if applicable. If necessary, use only respiratory protection authorized in the U.S. Federal OSHA Respiratory Protection Standard (29 CFR 1910.134), equivalent U.S. State standards, Canadian CSA Standard Z94.4-93, the European Standard EN149, or EU member states.

EYE PROTECTION: Safety glasses or goggles are recommended. If necessary, refer to U.S. OSHA 29 CFR 1910.133, Canadian Standards, and the European Standard EN166, Australian Standards, or relevant Japanese Standards.

HAND PROTECTION: Gloves are recommended to prevent skin contact. If necessary, refer to U.S. OSHA 29 CFR 1910.138, the European Standard DIN EN 374, the appropriate Standards of Canada, Australian Standards, or relevant Japanese Standards.

BODY PROTECTION: Use body protect appropriate to task being performed. If necessary, refer to appropriate Standards of Canada, or appropriate Standards of the EU, Australian Standards, or relevant Japanese Standards. If a hazard of injury to the feet exists due to falling objects, rolling objects, where objects may pierce the soles of the feet or where employee's feet may be exposed to electrical hazards, use foot protection, as described in U.S. OSHA 29 CFR 1910.136.

SECTION 9. PHYSICAL and CHEMICAL PROPERTIES

9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES:

APPEARANCE (Physical State) and COLOR: This product is white fine granular.

ODOR: Odorless

ODOR THRESHOLD: Not Available

pH: 10.4

MELTING/FREEZING POINT: Not Available

BOILING POINT: Not Available

FLASH POINT: Not Available

FLAMMABILITY (SOLID, GAS): Not Available

UPPER/LOWER FLAMMABILITY OR EXPLOSION LIMITS: Not Available

VAPOR PRESSURE (mm Hg @ 20°C (68°F): Not Available

VAPOR DENSITY: Not Available

RELATIVE DENSITY: Not Available

SPECIFIC GRAVITY: Not Available

SOLUBILITY IN WATER: 65% @ 25°C (77°F)

WEIGHT PER GALLON: Not Available

PARTITION COEFFICIENT (n-octanol/water): Not Available

AUTO-IGNITION TEMPERATURE: Not Available

DECOMPOSITION TEMPERATURE: Not Available

VISCOSITY: Not Available

9.2.1 INFORMATION WITH REGARD TO PHYSICAL HAZARD CLASSES

EXPLOSIVES: Not Available

FLAMMABLE GASES: Not Available

AEROSOLS: Not Available

OXIDISING GASES: Not Available

GASES UNDER PRESSURE: Not Available

FLAMMABLE LIQUIDS: Not Available

FLAMMABLE SOLIDS: Not Available

SELF-REACTIVE SUBSTANCES AND MIXTURES: Not Available

PYROPHORIC LIQUIDS: Not Available

PYROPHORIC SOLIDS: Not Available

SELF-HEATING SUBSTANCES AND MIXTURES: Not Available

SUBSTANCES AND MIXTURES, WHICH EMIT FLAMMABLE GASES IN CONTACT WITH WATER: Not Available

OXIDISING LIQUID: Not Available

OXIDISING SOLID: Not Available

ORGANIC PEROXIDES: Not Available

CORROSIVE TO METALS: Not Available

DESENSITISED EXPLOSIVES: Not Available

GASES UNDER PRESSURE: Not Available

9.2.2 OTHER SAFETY CHARACTERISTICS

MECHANICAL SENSITIVITY: Not Available

SELF-ACCELERATING POLYMERISATION TEMPERATURE: Not Available

FORMATION OF EXPLOSIBLE DUST/AIR MIXTURES: Not Available

ACID/ALKALINE RESERVE: Not Available

EVAPORATION RATE: Not Available

MISCIBILITY: Not Available

CONDUCTIVITY: Not Available

CORROSIVENESS: Not Available

GAS GROUP: Not Available

REDOX POTENTIAL: Not Available

RADICAL FORMATION POTENTIAL: Not Available

PHOTOCATALYTIC PROPERTIES: Not Available

SECTION 10. STABILITY and REACTIVITY

10.1 REACTIVITY:

No data available

10.2 STABILITY:

Stable under conditions of normal storage and use.

10.3 POSSIBILITY OF HAZARDOUS REACTIONS:

Will not occur.

10.4 CONDITIONS TO AVOID:

Avoid the creation of dust when handling. Prevent dust accumulation.

10.5 MATERIALS WITH WHICH SUBSTANCE IS INCOMPATIBLE:

Strong acids.

10.6 HAZARDOUS DECOMPOSITION PRODUCTS:

Oxides of phosphorus. Oxides of potassium.

SECTION 11. TOXICOLOGICAL INFORMATION

11.1 INFORMATION ON TOXICOLOGICAL EFFECTS:

TOXICITY DATA: No specific data available for this product.

| | |
|-----------------------------------|--|
| Acute toxicity | Based on available data, the classification criteria are not met |
| Skin corrosion / irritation | Skin Irritation Category 2 |
| Serious eye damage / irritation | Eye Irritation Category 2A |
| Respiratory or skin sensitization | Based on available data, the classification criteria are not met |
| Germ cell mutagenicity | Based on available data, the classification criteria are not met |
| Carcinogenicity | Based on available data, the classification criteria are not met |
| Reproductive toxicity | Based on available data, the classification criteria are not met |
| STOT-single exposure | Based on available data, the classification criteria are not met |
| STOT-repeated exposure | Based on available data, the classification criteria are not met |
| Aspiration hazard | Based on available data, the classification criteria are not met |

ROUTE OF EXPOSURE: The most significant routes of overexposure for this product are by contact with the skin or eyes. The symptoms of overexposure are described in the following paragraphs.

ACUTE:

INHALATION: May cause respiratory irritation.

CONTACT WITH SKIN: Exposure to skin may cause irritation.

EYE CONTACT: Contact with the eyes may cause irritation.

INGESTION: Ingestion of large quantities may cause abdominal cramps, nausea, vomiting, diarrhea.

CHRONIC: No data available.

TARGET ORGANS: **Acute:** Skin, Eyes, Respiratory System **Chronic:** No data available.

SUSPECTED CANCER AGENT: Ingredients within this product are not found on the following lists: FEDERAL OSHA Z LIST, NTP, IARC, or CAL/OSHA and therefore are not considered to be, nor suspected to be, cancer-causing agents by these agencies.

IRRITANCY OF PRODUCT: This product may be irritating to the skin, eyes, and respiratory system.

SENSITIZATION TO THE PRODUCT: No information available for this product.

REPRODUCTIVE TOXICITY INFORMATION: No specific information is available concerning the effects of this product and its components on the human reproductive system.

SPECIFIC TARGET ORGAN TOXICITY – SINGLE EXPOSURE: May cause respiratory irritation.

SPECIFIC TARGET ORGAN TOXICITY – REPEATED EXPOSURE: Data not sufficient for classification.

ASPIRATION HAZARD: Not an anticipated hazard.

11.2 INFORMATION ON OTHER HAZARD CLASSES WHICH RELATES TO ENDOCRINE DISRUPTING PROPERTIES:

No specific data available for this product.

SECTION 12. ECOLOGICAL INFORMATION

12.1 TOXICITY:

No specific data available on this product.

12.2 PERSISTENCE AND DEGRADABILITY:

No specific data available on this product.

12.3 BIOACCUMULATIVE POTENTIAL:

No specific data available on this product.

12.4 MOBILITY IN SOIL:

No specific data available on this product.

12.5 RESULTS OF PBT AND vPvB ASSESSMENT:

No specific data available on this product.

12.6 ENDOCRINE DISRUPTING PROPERTIES:

No specific data available on this product.

12.7 OTHER ADVERSE EFFECTS:

No specific data available on this product.

12.8 WATER ENDANGERMENT CLASS:

May be water endangering in accordance with EU Guideline 91/155-EWG. Do not allow product to reach ground water, water course or sewage system. At present there are no ecotoxicological assessments for this product.

SECTION 13. DISPOSAL CONSIDERATIONS

13.1 WASTE TREATMENT METHODS:

Waste disposal must be in accordance with appropriate U.S. Federal, State, and local regulations, those of Canada, Australia, EU Member States and Japan.

13.2 EU WASTE CODE:

Not determined.

SECTION 14. TRANSPORTATION INFORMATION

US DOT, IATA, IMO, ADR:

14.1 U.S. DEPARTMENT OF TRANSPORTATION (DOT) SHIPPING REGULATIONS: This product is classified (per 49 CFR 172.101) by the U.S. Department of Transportation, as follows.

| | |
|--|------------------------|
| UN IDENTIFICATION NUMBER: | None |
| PROPER SHIPPING NAME: | Non-Regulated Material |
| HAZARD CLASS NUMBER and DESCRIPTION: | None |
| PACKING GROUP: | None |
| DOT LABEL(S) REQUIRED: | None |
| NORTH AMERICAN EMERGENCY RESPONSE GUIDEBOOK NUMBER: | None |
| RQ QUANTITY: | None |
| NOTE: | None |

MARINE POLLUTANT: The components of this product are not designated by the Department of Transportation to be Marine Pollutants (49 CFR 172.101, Appendix B).

INTERNATIONAL AIR TRANSPORT ASSOCIATION SHIPPING INFORMATION (IATA): This product is not considered as dangerous goods.

INTERNATIONAL MARITIME ORGANIZATION SHIPPING INFORMATION (IMO): This product is not considered as dangerous goods.

EUROPEAN AGREEMENT CONCERNING THE INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY ROAD (ADR): This product is not considered by the United Nations Economic Commission for Europe to be dangerous goods.

SECTION 15. REGULATORY INFORMATION

15.1 SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS SPECIFIC FOR THE SUBSTANCE OR MIXTURE:

UNITED STATES REGULATIONS:

U.S. SARA REPORTING REQUIREMENTS: The components of this product are subject to the reporting requirements of Sections 302, 304, and 313 of Title III of the Superfund Amendments and Reauthorization Act as follows: None

U.S. SARA 311/312: Acute Health Hazard.

U.S. SARA THRESHOLD PLANNING QUANTITY: None

U.S. CERCLA REPORTABLE QUANTITY (RQ): None

U.S. TSCA INVENTORY STATUS: The components of this product are listed on the TSCA Inventory or are exempted from listing.

OTHER U.S. FEDERAL REGULATIONS: None known

CALIFORNIA SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT (PROPOSITION 65): This product does not contain ingredients on the Proposition 65 Lists.

15.2 CANADIAN REGULATIONS:

CANADIAN DSL/NDSL INVENTORY STATUS: Components are DSL Listed, NDSL Listed and/or are exempt from listing

OTHER CANADIAN REGULATIONS: Not applicable.

CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA) PRIORITIES SUBSTANCES LISTS:

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all of the information required by those regulations.

CANADIAN WHMIS CLASSIFICATION and SYMBOLS: This product is classified per 2015 WHMIS Hazardous Product Regulations.

15.3 EUROPEAN ECONOMIC COMMUNITY INFORMATION:

This product does meet the definition of a hazardous substance or preparation as defined by the European Union Council Directives 67/548/EEC, 1999/45/EC, 1272/2008/EC and subsequent Directives. See Section 2 for Details

CHEMICAL SAFETY ASSESSMENT :

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

15.4 AUSTRALIAN INFORMATION FOR PRODUCT: Components of this product are listed on the International Chemical Inventory list.

15.5 JAPANESE INFORMATION FOR PRODUCT:

JAPAN INDUSTRIAL SAFETY AND HEALTH LAW: This product has been classified per the Japan Industrial Safety and Health Law. See Section 2 for the GHS Classification.

15.6 INTERNATIONAL CHEMICAL INVENTORIES:

Listing of the components on individual country Chemical Inventories is as follows:

- Asia-Pac: Listed
- Australian Inventory of Chemical Substances (AICS): Listed
- Korean Existing Chemicals List (ECL): Listed
- Japanese Existing National Inventory of Chemical Substances (ENCS): Listed
- Philippines Inventory of Chemicals and Chemical Substances (PICCS): Listed
- Swiss Giftliste List of Toxic Substances: Listed
- U.S. TSCA: Listed
- Mexican Inventory of chemical substances (NOM 010 STPS 2015): Not Listed

SECTION 16. OTHER INFORMATION

| | |
|--|--|
| <p>HMIS Rating (Scale 0-4) Health hazard: 1 Flammability: 0 Physical Hazard: 0</p> | <p>NFPA Rating (Scale 0-4) Health hazard: 1 Flammability: 0 Physical Hazard: 0</p> |
|--|--|

Abbreviations and acronyms

| | |
|------------------|--|
| ACGIH | <i>American Conference of Governmental Industrial Hygienists</i> |
| CFR | <i>Code of Federal Regulations</i> |
| DOT | <i>Federal Department of Transportation</i> |
| GHS | <i>The Globally Harmonized System of Classification and Labelling of Chemicals</i> |
| HMIS | <i>Hazardous Material Identification System</i> |
| HCS | <i>Hazard Communication Standard</i> |
| IARC | <i>International Agency for Research on Cancer</i> |
| IATA | <i>The International Air Transport Association</i> |
| ICAO | <i>The International Civil Aviation Organization</i> |
| IMDG | <i>International Maritime Dangerous Goods</i> |
| IMO | <i>International Maritime Organization</i> |
| LD50/LC50 | <i>Lethal Concentration/Dose, 50 percent</i> |
| NFPA | <i>National Fire Protection Association</i> |
| NIOSH | <i>National Institute for Occupational Safety and Health</i> |
| NTP | <i>National Toxicology Program</i> |
| OSHA | <i>Occupational Safety and Health</i> |
| PEL | <i>Permissible Exposure Limit</i> |
| SARA | <i>Superfund Amendments and Reauthorization Act</i> |
| TLV | <i>ACGIH Threshold Limit Value</i> |
| TWA | <i>Time-Weighted Average</i> |

PREPARED BY: Chris Eigbrett

MSDS to GHS Compliance
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The information contained herein is believed to be accurate but is not warranted to be so. Data and calculations are based on information furnished by the manufacturer of the product and manufacturers of the components of the product. Users are advised to confirm in advance of the need that information is current, applicable and suited to the circumstances of use. Innophos, Inc. assumes no responsibility for injury to vendee or third party person proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Furthermore, Innophos, Inc. assumes no responsibility for injury caused by abnormal use of this material even if reasonable safety procedures are followed.

REVISION HISTORY

February 3, 2023

- Updated to comply with 2020/878. Updates to Section 2, 9, 11, 12, 16.

END OF SDS SHEET