



Tetrapotassium Pyrophosphate, Tech. Grade

SAFETY DATA SHEET

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SDS#: 304

Review/Revision Date: 05/15/17

SECTION 1 - General Information And Chemical Product Identification

Trade Name: **Tetrapotassium Pyrophosphate, Tech. Grade**

CAS #: **7320-34-5**

Chemical Name: **Pyrophosphoric Acid**

Product Code:
TKPPTGESC

Application/Uses/ **Used in detergents**

Restrictions **None Specified**

Distributor Information **LidoChem, Inc. 20 Village Court, Hazlet, NJ 07730, Phone: (732) 888 8000
Fax: (732) 264 2751 * email: info@lidochem.com**

Emergency phone #: **CHEMTREC - Day or Night - at 800 424 9300**

SECTION 2 - Hazard(s) Identification

Classification of the substance or mixture (GHS-US)

Skin irritation Category (2), H315
Eye irritation (Category 2A), H319
Specific target organ toxicity- single exposure(Category 3),
Respiratory system H335

Physical Hazards

NONE

Hazard Statement

H315: Causes skin irritation

H319: Causes serious eye irritation

H335: May cause respiratory irritation

OSHA Defined Hazards

This product does NOT contain any products considered hazardous under the Federal OSHA HazCom. Standard 29 CFR 1910.1200.

HNOC - Hazards Not Otherwise Classified

No other hazards classified



Irritant

Signal Word

Warning

GHS Precautionary Statements - Prevention, Response, Storage, Disposal

P261: Avoid breathing dust/fume/gas/mist/vapours/spray
P264: Wash skin thoroughly after handling

P271: Use only outdoors or in a well-ventilated area
P280: Wear protective gloves/protective clothing/eye protection/face protection

P302+352: IF ON SKIN: Wash with soap and water
P304+340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing

P320: Specific treatment is urgent (see supplemental first aid instructions on this label.

P332+313: If skin irritation occurs: Get medical advice/attention

P337+313: If eye irritation persists get medical advice/attention
P362: Take off contaminated clothing and wash before reuse

P403+233: Store in a well-ventilated place. Keep container tightly closed
P405: Store locked up

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SECTION 3 Composition/information On Ingredients

Molecular Weight: **330.4**

Chemical FORMULA: **K₄P₂O₇**

CAS#:	Common Name/Synonyms:	% by Wt.
7320-34-5	Tetrapotassium Pyrophosphate	95%

SECTION 4 - First Aid Information**Description of first aid measures****General Advice:**

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

If Inhaled:

Remove to fresh air. Rinse nose and mouth with water. breathing becomes difficult, oxygen may be given, preferably with a physician's advice. If not breathing, give artificial respiration. Get medical attention.

In Case Of Skin Contact:

In case of contact, immediately wash with plenty of soap and water for at least 5 minutes. Seek medical attention if irritation develops or persists. Remove contaminated clothing and shoes. Clean contaminated clothing and shoes before reuse.

In Case Of Eye Contact:

Flush eyes with large quantities of running water for a minimum of 15 minutes. If present and easy to do, remove contact lenses. Hold eyelids apart during the flushing to ensure rinsing of entire surface of the eye and lids with water. DO NOT let victim rub eye(s). Do not attempt to neutralize with chemical agents. Oils/ointments should not be used at this time. Get medical attention if eye irritation occurs.

If Swallowed:

If victim is conscious and alert, give 1-2 glasses of water to drink. **Never give anything to eat or drink to someone who is unconscious, having convulsions, or unable to swallow.** Seek immediate medical attention. Do not leave victim unattended. To prevent aspiration of swallowed product, lay victim on side with head lower than waist. Vomiting may occur spontaneously. If vomiting occurs and the victim is conscious, give water to further dilute the chemical.

Most important symptoms and effects, both acute and delayed:

ACUTE: At high dust concentrations, irritation of eyes, skin, nose and upper respiratory tract by chemical or mechanical action may occur.

Skin: May cause irritation **Eye:** Irritation and possible damage **Inhalation:** Dust may cause irritation of respiratory tract and symptoms of bronchitis may result. **Ingestion:** May result in irritation of mouth, throat and stomach **CHRONIC:** None Found
Large doses may cause nausea, vomiting and diarrhea. Systemic oral toxicity is extremely rare and has consisted of acidosis and hypocalcemic tetany.

Indication of any immediate medical attention and special treatment needed:

Treat symptomatically.

SECTION 5 - Fire And Explosion Data**Suitable Extinguishing Media:**

Not combustible. Use extinguishing method suitable for surrounding fire. Spray water, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable Extinguishing Media:

None specified

Specific Hazards arising from the chemical:

Oxides of phosphorus, potassium oxides.

Special protective equipment and precautions for fire-fighters:

Firefighters should wear NIOSH/MSHA approved self-contained breathing apparatus and full protective clothing.

Fire-fighting equipment/instructions

Keep unnecessary people away, isolate hazard area and deny entry. Evacuate residents who are downwind of fire. Dike area to prevent runoff and contamination of water sources. Dispose of fire control water later.

Specific Methods

Evacuate residents who are downwind of fire. Dike area to prevent runoff and contamination of water sources. Dispose of fire control water later.

Section 6 - Accidental Release Measures

Personal precautions, protective equipment and emergency procedures:

Do not touch or walk through spilled material. Keep Unauthorized personnel away. After wearing and using recommended protective equipment, stop source of spill if safe to do so and dike area to contain spill. See Section 8 for personal protective equipment.

Environmental Precautions:

Consult with environmental regulatory agencies for acceptable procedures of disposal. Do not contaminate drains.

Methods and Materials for Containment and Clean Up:

Sweep or vacuum up and place in an appropriate closed container. Clean up residual material by washing area with water and detergent. Decontaminate tools and equipment following clean up. If spilled on the ground, the affected area should be scraped clean and placed in an appropriate container for disposal. Large spills should be handled according to a predetermined plan. Product forms a slippery/greasy layer with water.

Section 7- Handling and Storage

Precautions for safe handling:

Use appropriate personal protective equipment as specified. Avoid direct or prolonged contact with skin and eyes. Avoid breathing dusts. Do not ingest. Store in an area that is cool, dry and well ventilated. Keep away from food stuffs or animal feed. Product is hygroscopic. Storage length 24 months.

Conditions for safe storage:

Keep in a dry place. Store at room temperature in the original container. Keep container tightly closed. Provide appropriate exhaust ventilation at places where dust is formed.

Incompatibilities:

Strong acids and oxidizing agents.

Section 8 - Exposure Control and Personal Protection

Occupational Exposure Limits:

Chemical Identity:	CAS #:	Exposure Limit Values		SOURCE	OSHA/PPM
		TWA	STEL		PEL
Tetrapotassium Pyrophosphate	7320-34-5			ACGIH Threshold Limit Values	15mg/cu m
				ACGIH Threshold Limit Values	
				ACGIH Threshold Limit Values	

Exposure Limits and Appropriate Engineering Controls:

Exposure limits represent regulated or recommended worker breathing zone concentrations measured by validated sampling and analytical methods, meeting OSHA requirements. The following limits (ACGIH, OSHA and other) apply to this material, where, if indicated, S=skin and C=ceiling limit: Particulates Not Otherwise Regulated Respirable Fraction: OSHA TWA: 5 mg/cu M

Individual Protection Measures, (Personal Protective Equipment):

Eye Protection

Eye and face protection requirements will vary dependent upon work environment conditions and material handling practices. Appropriate ANSI Z87 approved equipment should be selected for the particular use intended for this material. It is generally regarded as good practice to wear a minimum of safety glasses with side shields when working in industrial environments.

Skin Protection

Skin contact should be prevented through use of suitable protective clothing, gloves and footwear, selected with regard for use conditions and exposure potential. Consideration must be given both to durability as well as permeation resistance.

Other Protection:

Minimize breathing dust. Avoid prolonged or repeated breathing of dust and contact with skin. Remove contaminated clothing; launder before reuse. Cleanse skin thoroughly after contact, before meals and end of work period.

Respiratory Protection

When respirators are required, select NIOSH/MSHA approved equipment based on actual or potential airborne concentrations and in accordance with the latest OSHA standard (29 CFR 1910.134) and/or ANSI Z88.2 recommendations.

Ventilation Limits:

Where engineering controls are indicated by use conditions or a potential for excessive exposure exists, the following traditional exposure control techniques may be used to effectively minimize employee exposures: local exhaust ventilation at the point of generation.

Hygienic Practices:

All food / smoking materials should be kept in a separate area away from the storage/use location. Eating, drinking and smoking should be prohibited in areas where there is a potential for significant exposure to this material. Before eating, drinking or smoking, hands and face should be thoroughly washed. Facilities storing or using this material should be equipped with an eyewash and safety shower.

Section 9 - Physical and Chemical Properties

Appearance And Odor: Odorless white crystalline granular.

pH: 10.0 - 11.0

Melting Point: 1090C

Freezing Point: No data available

Boiling Point: Over 1500C

Flash Point: N/A

Evaporation Rate: No data available

Solubilities: 65 @ 25C

Specific Gravity: No data available

Bulk Density: 0.96 g/ml

Other Information:

Flammable Limits: Product is not flammable

UEL: Not determined

LEL: Not determined

Vapor Pressure(mm/hg): Non-Volatile

Vapor Density(air=1): Non-Volatile

Autoignition Temp: No data available

Decomposition Temp: No data available

Reactivity In Water: No data available

Viscosity: No data available

Section 10 - Stability and Reactivity**Chemical Stability and Reactivity:**

This material is stable under normal handling and storage conditions.

Possible Hazardous Reactions:

No dangerous reactions known

Conditions to Avoid:

Moisture.

Incompatible Materials:

Strong acids and oxidizing agents.

Hazardous Decomposition Products:

No decompositon

Section 11- Toxicological Information

Information On The Likely Routes Of Exposure: Inhalation, Ingestion and Dermal

Symptoms Related To The Physical, Chemical And Toxicological Effects:

Inhalation Effects:

No test data found for product.

Skin Effects:

Non irritating at 500 mg/kg (rabbit).

Dermal Toxicity:

LD50 - lethal dose 50% of test species > 4640 mg/kg, rabbit.

Eye Effects:

Moderately irritating to unwashed eyes; mildly irritating to washed eyes (rabbit).

Ingestion Effects:

LD50 - lethal dose 50% of test species > 1000 mg/kg rat.

Sensitization:

Not a sensitizer.

Carcinogenicity/Mutagenicity:

This product does not contain any substances that are considered by OSHA, NTP, IARC or ACGIH to be "probable" or "suspected" human carcinogens. No information found on Mutagenicity.

Reproductive Effects:

No data found for product.

Neurotoxicity:

No data found for product.

Target Organs:

No data found for product.

Additional Toxicological Information:

No additional information found.

Section 12- Ecological Information

Ecotoxicity: No data found for product.

Degradability: No data found for product.

Bioaccumulative potential:

Mobility in the Soil:

Additional Adverse effect on environment:

No additional information found.

SECTION 13 - Disposal Considerations**Disposal Instructions and Regulations:**

Chemical additions, processing or otherwise altering this material may make the waste management information presented in this MSDS incomplete, inaccurate or otherwise inappropriate. Be advised that state/local requirements for waste disposal may be more restrictive or otherwise different from federal laws and regulations. Consult state/local regulations regarding proper disposal of material.

Hazardous Waste Code: Not considered a hazardous waste

Container Disposal Information:

Be advised that state/local requirements for container disposal may be more restrictive or otherwise different from federal laws and regulations. Consult state/local regulations regarding proper disposal of container.

Section 14 - Transport Information**US DOT, IATA, IMO, ADR:**

Proper Shipping Name: Tetrapotassium Pyrophosphate

D. O. T. Hazard Class: Not regulated by D.O.T.

UN #: None

Label Requirement: None

RQ: N/A

Placard: None

CAS: 7320-34-5

Packing Group: N/A

ERG Book Information: 171

Environment Hazards: No

Marine Pollutant: No

Special Precautions: No

IATA: Not regulated as dangerous goods.

Section 15 - Regulatory Information**US Federal - OSHA Status:**

This product does NOT contain any products considered hazardous under the Federal OSHA HazCom. Standard 29 CFR 1910.1200.

TSCA Status:

Listed/Reportable

U.S. SARA Reporting Requirements:**SARA Title III Hazard Classes Section 302 - EXTREMELY HAZARDOUS SUBSTANCES:**

This product does NOT contain ingredients listed in Appendix A and B as Extremely Hazardous substances.

SARA Title III Hazard Classes Sections 311/312:

Immediate (acute) health hazard

SARA Section 313 Toxic Chemicals:

This product does not contain toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right to Know Act:

CAS# **Chemical Name:**

This material does NOT contain any chemical components with known CAS numbers that exceed the threshold reporting levels.

SARA Superfund Section 110:

This product does NOT contain ingredients listed as hazardous substances on the Priority List of CERCLA Hazardous substances.

CERCLA, 40 CFR 117, 302:

This product does NOT contain ingredients specified in the List of Extremely Hazardous Substances.

CERCLA listed substances are:

none

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Other Federal Reporting Requirements:

CAA: Not listed.
CWA: Not listed.
RCRA: Not considered a hazardous waste.

State Reporting Requirements:

State Right to Know Laws:

CAS#	State RTK	Chemical Name
7320-34-5	PA	Tetrapotassium Pyrophosphate

CALIFORNIA PROPOSITION 65:

This product does NOT contain a chemical or chemicals subject to California Proposition 65.

Michigan Critical Materials:

This product does NOT contain ingredients listed on the Michigan Critical Materials Register.

Global Lists/International Inventories:

Canada CEPA: All intentional ingredients are listed on the DSL.
Canada WHMIS: Not controlled.

SECTION 16 - Other Information

Medical Conditions Possibly Aggravated by Exposure:

Inhalation of product may aggravate existing chronic respiratory problems such as asthma, emphysema or bronchitis. Skin contact may aggravate existing skin disease. **Notes to Physician:**

All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

Ingestion of large quantities of phosphate salts (over 1.0 grams for an adult) may cause an osmotic catharsis resulting in diarrhea and probable abdominal cramps. Larger doses such as 4-8 grams will almost certainly cause these effects in everyone. In healthy individuals most of the ingested salt will be excreted in the feces with the diarrhea and, thus, not cause any systemic toxicity. Doses greater than 10 grams hypothetically may cause systemic toxicity. Treatment should take into consideration both anionic and cation portion of the molecule. The following treatments should be considered for the specific group(s) of phosphate salts found in this product.

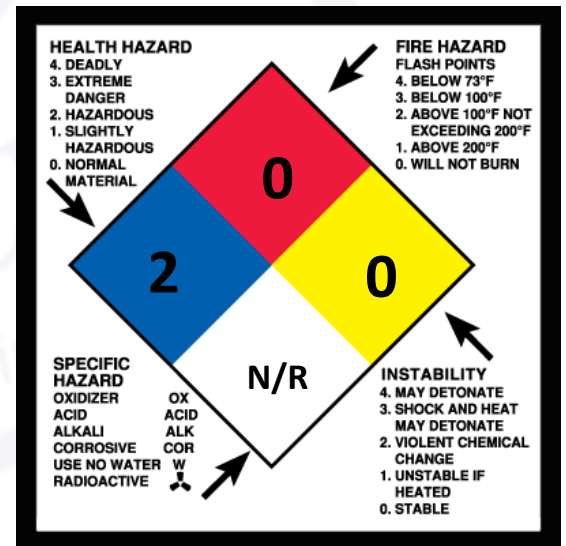
All phosphate salts, except calcium salts, have a hypothetical risk of hypocalcemia, so calcium levels should be monitored.

Ammonium salts have a hypothetical risk of ammonia toxicity. In addition to calcium levels, ammonia and phosphate levels should be monitored.

Potassium salts have a hypothetical risk of hyperkalemia which can cause cardiac arrhythmia. In addition to calcium levels, potassium and phosphate levels should be monitored. Also consider continuous EKG monitoring to detect hyperkalemia.

Sodium salts have a hypothetical risk of hypernatremia. In addition to calcium levels, sodium and phosphate levels should be monitored.

6-10-15 SDS reviewed - updated to GHS requirements. This replaces all previous MSDS's -



Date of last revision:

5-15-2017

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NOTICE: OSHA STANDARD 29 CFR 1910.1200 requires that information be provided to employees regarding the hazards of chemicals by means of a Hazard Communication Program including training, labeling, Material Safety Data Sheets, and access to written records. We request that you, and it is your legal duty, make all information in this Material Safety Data Sheet available to your employees.

Key Legend Information:

N/Ap:	Not Applicable	ND:	Not Determined
N/R:	Not Rated	NDA:	No Data Available
ACGI	American Conference of Govr'ntal Industrial Hygienists	TLV:	Threshold Limit Value
OSHA:	Occupational Safety and Health Administration	TWA:	Time Weighted Average
PEL:	Permissible Exposure Limit	NTP:	National Toxicology Program
STEL:	Short Term Exposure Limit	TSCA:	Toxic Substance Control Act
IARC:	International Agency for Research on Cancer	CERCLA:	Comprehensive Response, Compensation and Liability Act
SARA Title III:	Superfund Amendments and Reauthorization Act	CWA:	Clean Water Act
CAA:	Clean Air Act	IMO:	International Maritime Organization Shipping Info.
RCRA:	Resource Conservation Recovery Act	WHMIS:	Workplace Hazardous Materials Information System
IATA:	International Air Transport Association Shipping Info.		
DSL:	Domestic Substance List (Canada)		

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind expressed or implied is made with respect to the information contained herein. This Safety Data Sheet was prepared to comply with OSHA Hazard Communication standard. (29 CFR 1910.1200 HazCom 2012). This supersedes any previous information. Since the actual use by others is beyond our control, no guarantee, expressed or implied, is made by LidoChem, Inc. as to the effects of such use or the results to be obtained, nor does LidoChem, Inc. assume any liability arising out of use, by others, of the products referred to herein. Nor is the information herein to be construed as absolutely complete since additional information may be necessary or desirable when particular or exceptional conditions or circumstances exist because of applicable laws or government regulations. All LidoChem Inc. SDS's are reviewed every three years or sooner if necessary. Please check the Review Date on Page 1 for most current version. Please request a new SDS from LidoChem, Inc. if the date is older than 3 years.