Monopotassium Phosphate, Technical Grade

SAFETY DATA SHEET

SDS#: **1659**

Review/Revision Date: **01/15/17**

SECTION 1 - General Information And Chemical Product Identification

Trade Name: Monopotassium Phosphate, Technical Grade

CAS #: 7778-77-0

Chemical Name: Monopotassium Phosphate

Product Code: MKPTGSAC

Application/Uses/ Used in Fertilizer production to keep the pH at a lower level, a buffering agent, fire retardant

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)

NOT CLASSIFIED

Physical Hazards
NONE

Hazard Statement
No Label Element(s) required

GHS Precautionary Statements - Prevention, Response, Storage, Disposal

No label elements required

PREVENTION: Not Applicable

RESPONSE: Not Applicable

STORAGE: Not Applicable

P501: Dispose of contents/container to local, state and federal regulations.

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

Signal Word

None

SECTION 3 Composition/information On Ingredients

Molecular Weight: 136.09 **Chemical FORMULA:** KH_2PO_4

CAS#:	Common Name/Synonyms:	% by Wt.
7778-77-0	Monopotassium Phosphate	100%

SECTION 4 - First Aid Information

Description of first aid measures

General Advice:

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.

If Inhaled:

Remove to fresh air. If 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 15 minutes. Seek medical attention. Remove contaminated clothing and shoes before reuse or discard if they cannot be thoroughly cleaned.

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 used at this time. Get medical attention if eye irritation occurs.

If Swallowed:

If victim is conscious and alert, give 2-3 glasses of water to drink and DO NOT INDUCE VOMITING unless instructed to do so by a physician. **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. Vomiting may occur spontaneously. To prevent aspiration of swallowed product, lay victim on side with head lower than waist. 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. **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**: This product does NOT contain any ingredient designated by IARC, NTP, ACGIH or OSHA as probable or suspected human carcinogen.

Indication of any immediate medical attention and special treatment needed:

Call 911 or emergency medical service. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

SECTION 5 - Fire And Explosion Data

Suitable Extinguishing Media:

Not combustible. Use extinguishing method suitable for surrounding fire.

UnSuitable Extinguishing Media:

None known,

Specific Hazards arising from the chemical:

Hazardous combustion products: Oxides of phosphorus, oxides of potassium.

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

Standard procedure for chemical fires.

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:

Runoff from fire control or dilution water may cause pollution. Large spills should be handled according to a predetermined plan. Consult with environmental regulatory agencies for acceptable procedures of disposal.

Methods and Materials for Containment and Clean Up:

Stop source of spill if safe to do so. Sweep up spilled solid material, being careful not to create dust. Use clean non-sparking tools and equipment. Return sweeping to stock or, if contaminated, place into a chemical waste container for disposal. Wash away residue with water, without contaminating drains. Soak up wash water with suitable absorbent or sand, sweep up and dispose of in accordance with local regulations.

Section 7- Handling and Storage

Precautions for safe handling:

Use appropriate personal protective equipment as specified. Handle in a well ventilated area. Handle and use in a manner consistent with good industrial/manufacturing techniques and practices. Keep containers closed when not in use. Avoid breathing dust. Avoid direct or prolonged contact with skin and eyes.

Conditions for safe storage:

Store in a cool, dry place. This product is hygroscopic and tends to cake on storage. Keep in a dry place. Store at room temperature in the original container. Provide appropriate exhaust ventilation at places where dust is formed.

Incompatibilites:

None known.

Section 8 - Exposure Control and Personal Protection

Occupational Exposure Limits:

Chemical Identity:	CAS #:	Exposure Limit Values		SOURCE	OSHA/PPM
		TWA	STEL		PEL
Monopotassium Phosphate	7778-77-0			ACGIH Threshold Limit Values	none
				ACGIH Threshold Limit Values	
				ACGIH Threshold Limit Values	

Exposure Limits and Appropriate Engineering Controls:

No exposure limits were found for this product or any of its ingredients.

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 minimized through use of gloves and suitable long sleeved clothing (i.e., shirts and pants). Consideration must be given both to durability as well as permeation resistance.

Other Protection:

Where engineering controls are indicated by use conditions or a potential for excessive exposure exists, the above listed and following traditional exposure control techniques may be used to effectively minimize employee exposures.

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. For limited exposure use an N95 dust mask. For prolonged exposure use an air- purifying respirator with high efficiency particulate air (HEPA) filters. Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or symptoms are experienced.

Ventilation Limits:

Local exhaust ventilation at the point of generation is recommended.

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 powder solid.

pH: 4-3- 4.8

Melting Point:	253 C(487.4 F)	**Flammable Limits:**	N/A
Freezing Point:	No data available	**UEL:**	Not relevant
Boiling Point:	N/A	**LEL:**	Not relevant
Flash Point:	N/A	**Vapor Pressure(mm/hg):**	No data available
Evaporation Rate:	No data available	**Vapor Density(air=1):**	No data available
Solubilities:	soluble	**Autoignition Temp:**	No data available
Specific Gravity:	1.25	**Decomposition Temp:**	No data available
Bulk Density:	1.0 g/l	**Reactivity In Water:**	N/A
Other Information:		**Viscosity:**	

Section 10 - Stability and Reactivity

Chemical Stability and Reactivity:

This material is stable under normal handling and storage conditions.

Possible Hazardous Reactions:

Hazardous polymerization will not occur.

Conditions to Avoid:

None known.

Incompatible Materials:

None known.

Hazardous Decomposition Products:

Oxides of phosphorus, oxides of potassium.

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:

Skin irritation, rabbit. Mild irritant.

Dermal Toxicity:

LD50 - lethal dose 50% of test species, > 7950 mg/kg, rabbit.

Eye Effects:

No test data found for product.

Ingestion Effects:

LD50 - lethal dose 50% of test species, 7100 mg/kg, rat.

Sensitization:

Not available.

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 on mutagenicity found for this product.

Reproductive Effects:

Not available.

Neurotoxicity:

Not available.

Target Organs:

Not available.

Additional Toxicological Information:

None.

Section 12- Ecological Information

Ecotoxicity: Not data available.

Degradability: Not data available.

Bioaccumulative potential: Not data available.

Mobility in the Soil: Not data available.

Additional Adverse effect on environment:

None

SECTION 13 - Disposal Considerations

Disposal Instructions and Regulations:

Chemical additions, processing or otherwise altering this material may make the waste management information present 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: **Monopotassium Phosphate**

D. O. T. Hazard Class:	Not regulated by D.O.T.	**UN #:**	N/A
Label Requirement:	None	**RQ:**	N/A
Placard:	None	**CAS:**	7778-77-0
Packing Group:	N/A	**ERG Book Information:**	None.
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:

N/Ap

SARA Section 313 Toxic Chemicals:

This product contains the following toxic chemical 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

Other Federal Reporting Requirements:

CAA: This product does not contain any substances regulated as hazardous air pollutants (HAPS) under Section 112 of the Clean Air Act

CWA: No chemicals in product are listed a Hazardous Substances, Priority Pollutants or Toxic Pollutants under the CWA.

RCRA: Not considered a hazardous waste.

State Reporting Requirements:

State Right to Know Laws:

CAS#	State RTK	Chemical Name
		None

CALIFORNIA PROPOSITION 65:

This product contains a chemical (or chemicals) known to the State of California to cause birth defects or other reproductive harm.

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 DSL.

Canada WHMIS: Not controlled.

SECTION 16 - Other Information

Medical Conditions Possibly Aggravated by Exposure:

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.

Notes to Physician:

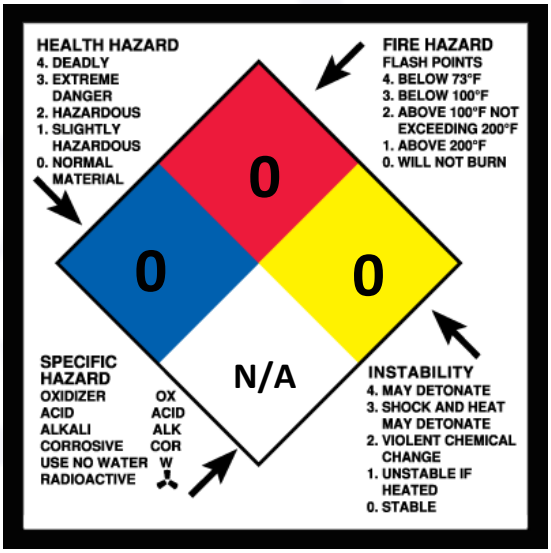
Ingestion of large quantities of phosphate salts (over 1.0 grams for an adult) may cause an osmotic catharsis resulting in diarrhea and probable abdominal cramps. Larger doses such as 4-8 grams will almost certainly cause these effects in everyone. In healthy individuals most of the ingested salt will 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.



Date of last revision:

1-15-2017

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

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.