



Safety Data Sheet

For Compliance with OSHA 29 CFR 1910.1200 and ANSI Z400.1-1998

Potassium Nitrate USP

50-1460

Section 1: Identification

Product Name Potassium Nitrate USP
Commercial Name Not available.
Product Use Not available.
Restrictions On Use Not available.

Product Code 50-1460

Company PCCA
9901 South Wilcrest
Houston, TX 77099
Phone: 1-800-331-2498
Fax: 1-800-874-5760

In case of emergency contact:
CHEMTREC (24hr) 1-800-424-9300

Section 2: Hazard(s) Identification

OSHA Haz Com: Oxidizing solids Category 3 Acute hazards to the aquatic environment Category 3
CFR 1910.1200

Signal Word WARNING

Hazard Statement(s) May intensify fire; oxidizer.

Pictogram(s) or Symbol(s)



Precautionary Statement(s):

Prevention	Keep away from heat. - No smoking. Keep/Store away from clothing and other combustible materials. Take any precaution to avoid mixing with combustibles. Wear protective gloves/protective clothing/eye protection/face protection. Avoid release to the environment.
Response	In case of fire: Use water for extinction. Call a POISON CENTER/doctor if you feel unwell.
Storage	Not available.
Disposal	Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Section 3: Composition/Information on Ingredients

Substance/Mixture Substance
Components Potassium nitrate
% By Weight 100
CAS# 7757-79-1
Molecular Weight 101.1 g/mole
Chemical Formula KNO₃
Synonym(s) Nitric Acid, potassium salt; saltpeter

Mixtures				
Name	CAS#	% by Weight	TLV/PEL	LC50/LD50
Potassium nitrate	7757-79-1	100	Not available.	ORAL (LD50):Acute: 3750mg/kg [Rat]. 1901 mg/kg [Rabbit].



Safety Data Sheet

For Compliance with OSHA 29 CFR 1910.1200 and ANSI Z400.1-1998

Potassium Nitrate USP

50-1460

Section 4: First-Aid Measures

Inhalation	Move to fresh air. Get medical attention if symptoms persist.
Skin Contact	Wash skin thoroughly with soap and water. Get medical attention if symptoms occur.
Eye Contact	Flush thoroughly with water. If irritation occurs, get medical assistance.
Ingestion	Rinse mouth. Get medical attention if symptoms occur.
Symptoms/Effects	
Acute	May cause irritation to skin, eyes and respiratory tract.
Delayed	May cause irritation to skin, eyes and respiratory tract.
Immediate Medical Attention	
Treat symptomatically. Symptoms may be delayed.	

Section 5: Fire-Fighting Measures

Suitable Extinguishing Media

The product is non-combustible. Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable Extinguishing Media

Not available.

Products of Combustion

Strong oxidizer. Contact with combustible material may cause fire. Fire or high temperatures may cause explosive decomposition, especially if confined. Fire may produce irritating, corrosive and/or toxic gases.

Firefighters Special Equipment and Precautions

Use water spray to keep fire-exposed containers cool. Move containers from fire area if you can do so without risk. Withdraw immediately in case of rising sound from venting safety device or any discoloration of tanks due to fire. Cool containers exposed to flames with water until well after the fire is out. Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Section 6: Accidental Release Measures

Personal precautions, protective equipment and emergency procedures: ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Keep unauthorized personnel away. Use personal protective equipment. See Section 8 of the SDS for Personal Protective Equipment. Ventilate closed spaces before entering them. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Methods and material for containment and cleaning up: Keep combustibles (wood, paper, oil, etc.) away from spilled material. Avoid dust formation. Sweep up and place in a clearly labeled container for chemical waste. Collect in a non-combustible container for prompt disposal. Clean surface thoroughly to remove residual contamination. Notification Procedures: Dike for later disposal. Prevent entry into waterways, sewer, basements or confined areas. Stop the flow of material, if this is without risk. Inform authorities if large amounts are involved. Environmental Precautions: Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground. Do not contaminate water sources or sewer.

Section 7: Handling and Storage

Precautions for safe handling: DO NOT handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Keep away from combustible material. Use personal protective equipment as required. Avoid contact with eyes, skin, and clothing. Do not breathe dust. Use only with adequate ventilation. Wash hands thoroughly after handling. Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Conditions for safe storage, including any incompatibilities: Keep material from heat, light, sparks and flame. Oxidizing material - Keep away from flammable and combustible materials. Store away from incompatible materials. Keep container tightly closed. Store in a dry place. Store in a well-ventilated place.

Section 8: Exposure Controls/Personal Protection

Exposure Limits	Not available.
Engineering Controls	Not available.

Safety Data Sheet

For Compliance with OSHA 29 CFR 1910.1200 and ANSI Z400.1-1998

Personal Protection

General information: Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. An eye wash and safety shower must be available in the immediate work area. Eye/face protection: Wear safety glasses with side shields (or goggles). Skin Protection Hand Protection: Chemical resistant gloves Other: Chemical resistant clothing. Respiratory Protection: In case of inadequate ventilation use suitable respirator. High-efficiency particulate respirator with full facepiece. Hygiene measures: Provide eyewash station and safety shower. Keep from contact with clothing and other combustible materials. Remove and wash contaminated clothing promptly. Observe good industrial hygiene practices. Wash hands before breaks and immediately after handling the product. Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Avoid contact with eyes, skin, and clothing.

Section 9: Physical and Chemical Properties

Appearance	White, Colorless Crystals or powder. Solid		
Odor	Odorless.		
Odor Threshold	Not available.		
Melting Point	333 - 337 °C	pH	7
Freezing Point	Not available	Vapor Pressure	Not applicable.
Boiling Point/Range	400 °C	Vapor Density	Not available.
Decomposition temperature	752 T (400 °C)	Viscosity	Not available.
Partition Coefficient: n-octanol/water	Not available.	Evaporation Rate	Not available.
Flash Point	Not applicable.	Autoignition temperature	Not available.
Flammability	Not available.	Flammability or Explosive Limits:	
		Lower	Not available.
		Upper	Not available.
Solubility(ies)	316 g/l (20 °C) 357 g/l (35 °C) in water. glycerol: Soluble alcohol: Slightly soluble ethanol: Practically insoluble		
Other	Not available.		

Section 10: Stability and Reactivity

Reactivity	No dangerous reaction known under conditions of normal use.
Chemical Stability	Stable; however, may decompose if heated.
Hazardous Polymerization	Hazardous polymerization does not occur.
Conditions to Avoid	Contact with combustibles. Excessive heat. Contact with incompatible materials
Incompatible Materials	Flammable/combustible material. Organic compounds. Strong acids. Metals
Hazardous Decomposition Products	Oxygen. Nitrogen oxides.

Section 11: Toxicological Information

RTECS	TT370000
Acute Toxicity	Oral Product: LD 50 (Rat): 3.750 mg/kg Dermal Product: LD 50 (Rat): > 5.000 mg/kg Inhalation Product: LC 50 (Rat): > 0,527 mg/l
Skin Corrosion/Irritation	Prolonged skin contact may cause temporary irritation.
Serious Eye Damage/Irritation	May cause temporary eye irritation.
Respiratory or Skin Sensitization	Not a skin nor a respiratory sensitizer.
Germ Cell Mutagenicity	Not available.
Carcinogenicity	This substance has no evidence of carcinogenic properties.
Reproductive Toxicity	Not available.
Routes of Entry	



Safety Data Sheet

For Compliance with OSHA 29 CFR 1910.1200 and ANSI Z400.1-1998

Potassium Nitrate USP

50-1460

Inhalation. Skin. Eye. Ingestion. Inhalation: Dust may irritate throat and respiratory system and cause coughing. Skin Contact: Prolonged skin contact may cause temporary irritation. Eye contact: May cause temporary eye irritation. Ingestion: May be harmful if swallowed.

Symptoms Related to Exposure

Not available.

Potential Health Effects

Not available.

Target Organ(s) Not available.

Section 12: Ecological Information

Ecotoxicity

Fish Product: No data available. Specified substance(s): Potassium Nitrate LC 50 (Bluegill (*Lepomis macrochirus*), 96 h): 420 mg/l LC 50 (Western mosquitofish (*Gambusia affinis*), 96 h): 62 mg/l NOAEL (Oncorhynchus mykiss, 96 h): 98,9 mg/l LC 50 (Oncorhynchus mykiss, 96 h): > 98,9 mg/l Aquatic Invertebrates Product: No data available. Specified substance(s): Potassium Nitrate LC 50 (Pond snail (*Lymnaea*), 48 h): 1.492 mg/l LC 50 (Water flea (*Daphnia magna*), 48 h): 490 mg/l EC 50 (Water flea (*Daphnia magna*), 48 h): 490 mg/l

Persistence and Degradability

Not available.

Bioaccumulative Potential

Not available.

Mobility in Soil

The product is water soluble and may spread in water systems.

Other Adverse Effects

Harmful to aquatic organisms.

Section 13: Disposal Considerations

Waste Disposal

Discharge, treatment, or disposal may be subject to national, state, or local laws.

Disposal of Container

Since emptied containers retain product residue, follow label warnings even after container is emptied.

Other Considerations

Not available.

Section 14: Transport Information

DOT Classification

UN Number: UN 1486 UN Proper Shipping Name: POTASSIUM NITRATE Transport Hazard Class(es) Class: 5.1 Label(s): 5.1 Packing Group: III Marine Pollutant: No Special precautions for user: Not determined.

Section 15: Regulatory Information

Regulations



Safety Data Sheet

For Compliance with OSHA 29 CFR 1910.1200 and ANSI Z400.1-1998

Potassium Nitrate USP

50-1460

US federal regulations: This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. All components are on the U.S. EPA TSCA Inventory List. CERCLA/SARA Hazardous Substances - Not applicable. US EPCRA (SARA Title III) Section 313 - Toxic Chemical: Listed substance Potassium Nitrate (CAS 7757-79-1) Listed. N511 CERCLA (Superfund) reportable quantity: None. Superfund Amendments and Reauthorization Act of 1986 (SARA) Hazard Categories - Immediate Hazard: No. Delayed Hazard: No. Fire Hazard: Yes. Pressure Hazard: No. Reactivity Hazard: No. Section 311 Hazardous chemical: Yes. State Regulations This product doesn't contain a chemical known to the State of California to cause cancer, birth defects, or other reproductive harm. New Jersey RTK (EHS Survey): Reportable threshold: Potassium nitrate (CAS 7757-79-1) 500 lbs. Pennsylvania RTK - Hazardous Substances: Listed substance: Potassium nitrate (CAS 7757-79-1) Listed. Inventory Status Country(s)/Region Inventory Name

On Inventory* Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes Canada
Non-Domestic Substances List (NDSL)	No China	Inventory of
Existing Chemical Substances in China (IECSC)	Yes Europe	European Inventory of
Existing Commercial Chemical Substances (EINECS)	Yes Europe	European List of Notified Chemical
Substances (ELINCS)	No Japan	Inventory of Existing and New Chemical Substances
(ENCS)	Yes Korea	Existing Chemicals List (ECL)
Yes New Zealand	New Zealand Inventory	Yes Philippines
Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes United States &	Toxic
Substances Control Act (TSCA)	Yes Puerto Rico	*A "Yes" indicates that all

components of this product comply with the inventory requirements administered by the governing country(s).

Other

Not available.

Section 16: Other Information

THE INFORMATION PRESENTED IN THIS MATERIAL SAFETY DATA SHEET (MSDS /SDS) WAS PREPARED BY TECHNICAL PERSONNEL BASED ON DATA THAT THEY BELIEVE IN THEIR GOOD FAITH JUDGMENT IS ACCURATE. HOWEVER, THE INFORMATION PROVIDED HEREIN IS PROVIDED "AS IS," AND AVANTOR PERFORMANCE MATERIALS MAKES AND GIVES NO REPRESENTATIONS OR WARRANTIES WHATSOEVER, AND EXPRESSLY DISCLAIMS ALL WARRANTIES REGARDING SUCH INFORMATION AND THE PRODUCT TO WHICH IT RELATES, WHETHER EXPRESS, IMPLIED, OR STATUTORY, INCLUDING WITHOUT LIMITATION, WARRANTIES OF ACCURACY, COMPLETENESS, MERCHANTABILITY, NON-INFRINGEMENT, PERFORMANCE, SAFETY, SUITABILITY, STABILITY, AND FITNESS FOR A PARTICULAR PURPOSE, AND ANY WARRANTIES ARISING FROM COURSE OF DEALING, COURSE OF PERFORMANCE, OR USAGE OF TRADE. THIS MSDS /SDS IS INTENDED ONLY AS A GUIDE TO THE APPROPRIATE PRECAUTIONARY HANDLING OF THE MATERIAL BY A PROPERLY TRAINED PERSON USING THIS PRODUCT, AND IS NOT INTENDED TO BE COMPREHENSIVE AS TO THE MANNER AND CONDITIONS OF USE, HANDLING, STORAGE, OR DISPOSAL OF THE PRODUCT. INDIVIDUALS RECEIVING THIS MSDS /SDS MUST ALWAYS EXERCISE THEIR OWN INDEPENDENT JUDGMENT IN DETERMINING THE APPROPRIATENESS OF SUCH ISSUES. ACCORDINGLY, AVANTOR PERFORMANCE MATERIALS ASSUMES NO LIABILITY WHATSOEVER FOR THE USE OF OR RELIANCE UPON THIS INFORMATION. NO SUGGESTIONS FOR USE ARE INTENDED AS, AND NOTHING HEREIN SHALL BE CONSTRUED AS, A RECOMMENDATION TO INFRINGE ANY EXISTING PATENTS OR TO VIOLATE ANY FEDERAL, STATE, LOCAL, OR FOREIGN LAWS. AVANTOR PERFORMANCE MATERIALS REMINDS YOU THAT IT IS YOUR LEGAL DUTY TO MAKE ALL INFORMATION IN THIS MSDS /SDS AVAILABLE TO YOUR EMPLOYEES.