



HI-VALLEY CHEMICAL

LABORATORY PRODUCTS

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SAFETY DATA SHEET

Hi Valley Chemical

Potassium Nitrate

1 PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: Potassium Nitrate
SDS Number: R-055
Product Code: 516511-1, 516511-5, 516511-10, 516511-50
Revision Date: 7/18/2016
Version: 1
Supplier Details: High Valley Products, Inc.
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Centerville, Utah 84014
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2 HAZARDS IDENTIFICATION

Classification of the Substance or Mixture

GHS Classification in Accordance with 29 CFR 1910 (OSHA HCS):

Environmental, Hazards to the aquatic environment - Acute, 3
Physical, Oxidizing Solids, 3
Health, Acute toxicity, 5 Oral

GHS Label Elements, Including Precautionary Statements

GHS Signal Word: **WARNING**

GHS Hazard Pictograms:



GHS Hazard Statements:

H402 - Harmful to aquatic life
H272 - May intensify fire; oxidizer
H303 - May be harmful if swallowed

GHS Precautionary Statements:

P210 - Keep away from heat/sparks/open flames/hot surfaces. No smoking
P220 - Keep/Store away from clothing/combustible materials.
P221 - Take any precaution to avoid mixing with combustibles.
P273 - Avoid release to the environment.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P370+378 - In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.
P501 - Dispose of contents/container to local regulations.

3 COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients:

Cas#	%	Chemical Name

4 FIRST AID MEASURES

Inhalation:	If inhaled, move person to fresh air. If not breathing, give artificial respiration. Consult a physician.
Skin Contact:	Wash with soap and water. Consult a physician.
Eye Contact:	Immediately flush eyes with large amounts of water for at least 15 minutes, lifting eyelids occasionally to facilitate irrigation.

5 FIRE FIGHTING MEASURES

Extinguishing media
 Suitable extinguishing media
 Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special hazards arising from the substance or mixture
 No data available

Advice for firefighters
 Wear self-contained breathing apparatus for firefighting if necessary.

Further information
 No data

6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

Environmental precautions:

Do not let product enter drains.

Methods and materials for containment and cleaning up:

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

7 HANDLING AND STORAGE

Handling Precautions:	Avoid formation of dust. Provide appropriate exhaust ventilation at places where dust is formed. Keep away from sources of ignition - No smoking. Keep away from heat and sources of ignition. Normal measures for preventive fire protection.
Storage Requirements:	Keep container tightly closed in a dry and well-ventilated place.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Personal Protective Equipment:	Potassium nitrate (7757-79-1) [] Personal protective equipment Respiratory protection: Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Hand protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching gloves outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash
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and dry hands. Immersion protection Material: Nitrile rubber Minimum layer thickness: 0.11 mm Break through time: > 480 min Material tested: Dermatril (Aldrich Z677272, Size M)

Splash protection: Material: Nitrile rubber Minimum layer thickness: 0.11 mm Break through time: > 30 min Material tested: Dermatril (Aldrich Z677272, Size M) data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 873000, e-mail sales@kcl.de, test method: EN374 If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an Industrial Hygienist familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Eye protection: Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin and body protection: impervious clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Hygiene measures: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Potassium nitrate (7757-79-1) [] : no data available

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PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Crystalline
Physical State:	Solid
Odor:	No data available
Odor Threshold:	No data available
Solubility:	No data available
Spec Grav./Density:	2.109
Viscosity:	No data available
Boiling Point:	No data available
Freezing/Melting Pt.:	334 °C (633 °F)
Flash Point:	No data available
Partition Coefficient:	No data available
Vapor Pressure:	No data available
Vapor Density:	No data available
pH:	5.5 - 8
Evap. Rate:	No data available
Auto-Ignition Temp:	No data available
Decomp Temp:	No data available
UFL/LFL:	No data available

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STABILITY AND REACTIVITY

Reactivity:	No data available
Chemical Stability:	Stable under recommended storage conditions.
Conditions to Avoid:	No data available
Materials to Avoid:	Reducing agents; powdered metals; Strong Acids; Organic materials
Hazardous Decomposition:	No data available

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TOXICOLOGICAL INFORMATION

Potassium nitrate (7757-79-1) []

Information on toxicological effects

Acute toxicity:

Oral LD50 LD50 Oral - rat - 3,750 mg/kg
Inhalation LC50 no data available
Dermal LD50
Other information on acute toxicity

Skin corrosion/irritation: no data available

Serious eye damage/eye irritation: no data available

Respiratory or skin sensitization: no data available

Germ cell mutagenicity: no data available

Carcinogenicity:

IARC: 2A - Group 2A: Probably carcinogenic to humans (Potassium nitrate)

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity: Reproductive toxicity - rat - Oral:

Effects on Fertility: Other measures of fertility

Reproductive toxicity - rat - Oral:

Effects on Newborn: Behavioral.

Reproductive toxicity - rabbit - Oral:

Effects on Fertility: Abortion.

Reproductive toxicity - guinea pig - Oral:

Effects on Newborn: Stillbirth.

Reproductive toxicity - guinea pig - Oral:

Effects on Fertility: Female fertility index (e.g., # females pregnant per # sperm positive females; # females pregnant per # females mated).

Effects on Embryo or Fetus: Other effects to embryo.

no data available

Teratogenicity: no data available

Specific target organ toxicity - single exposure (Globally Harmonized System):

no data available

Specific target organ toxicity - repeated exposure (Globally Harmonized System):

no data available

Aspiration hazard: no data available

Potential health effects: Inhalation May be harmful if inhaled. May cause respiratory tract irritation. Ingestion May be harmful if swallowed.

Skin May be harmful if absorbed through skin. May cause skin irritation. Eyes May cause eye irritation.

Signs and Symptoms of Exposure: Absorption into the body leads to the formation of methemoglobin which in sufficient concentration causes cyanosis. Onset may be delayed 2 to 4 hours or longer.

Synergistic effects: no data available

Additional Information:

RTECS: TT3700000

Information on ecological effects

Toxicity:

Toxicity to fish LC50 - *Gambusia affinis* (Mosquito fish) - 22.5 mg/l - 96 h.

Toxicity to daphnia EC50 - *Daphnia magna* (Water flea) - 226 mg/l - 72 h.
and other aquatic invertebrates

Persistence and degradability: no data available

Bioaccumulative potential: no data available

Mobility in soil: no data available

PBT and vPvB assessment: no data available

Other adverse effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Harmful to aquatic life.

13 DISPOSAL CONSIDERATIONS

Dispose of in accordance with local regulations.

14 TRANSPORT INFORMATION

UN1486, Potassium nitrate, 5.1, PGIII

15 REGULATORY INFORMATION

Component (CAS#) [%] - CODES

Potassium nitrate (7757-79-1) [n/a%] MASS, NJHS, PA, TSCA, TXAIR

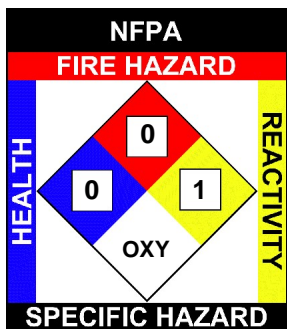
Regulatory CODE Descriptions

MASS = MA Massachusetts Hazardous Substances List
NJHS = NJ Right-to-Know Hazardous Substances
PA = PA Right-To-Know List of Hazardous Substances
TSCA = Toxic Substances Control Act
TXAIR = TX Air Contaminants with Health Effects Screening Level

16 OTHER INFORMATION

NFPA: Health = 0, Fire = 0, Reactivity = 1, Specific Hazard = OXY

HMIS III: Health = 1(Chronic), Fire = 0, Physical Hazard = 1



HMIS	
HEALTH	<input checked="" type="checkbox"/> 1
FLAMMABILITY	0
PHYSICAL HAZARD	1
PERSONAL PROTECTION	<input type="checkbox"/>

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