



HI-VALLEY CHEMICAL
LABORATORY PRODUCTS

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SAFETY DATA SHEET

Hi Valley Chemical

Potassium Chlorate

1 PRODUCT AND COMPANY IDENTIFICATION

Supplier Details: High Valley Products, Inc.
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2 HAZARDS IDENTIFICATION

Classification of the Substance or Mixture

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

- Physical, Oxidizing Solids, 1
- Health, Serious Eye Damage/Eye Irritation, 2 B
- Health, Skin corrosion/irritation, 3
- Health, Acute toxicity, 4 Inhalation
- Health, Acute toxicity, 4 Oral
- Health, Acute toxicity, 5 Dermal
- Environmental, Hazards to the aquatic environment - Chronic, 2

GHS Label Elements, Including Precautionary Statements

GHS Signal Word: **DANGER**

GHS Hazard Pictograms:



GHS Hazard Statements:

- H271 - May cause fire or explosion; strong oxidizer
- H320 - Causes eye irritation
- H316 - Causes mild skin irritation
- H332 - Harmful if inhaled
- H302 - Harmful if swallowed
- H313 - May be harmful in contact with skin
- H411 - Toxic to aquatic life with long lasting effects

GHS Precautionary Statements:

- P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- P220 - Keep/Store away from clothing/ combustible materials.
- P271 - Use only outdoors or in a well-ventilated area.
- P273 - Avoid release to the environment.
- P280 - Wear protective gloves/protective clothing/eye protection/face protection.
- P283 - Wear fire resistant or flame retardant clothing.
- P301 + P312 - IF SWALLOWED: Call a POISON CENTER/ doctor/...if you feel unwell.
- P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P306 + P360 - IF ON CLOTHING: Rinse immediately contaminated clothing and skin with plenty of water before removing clothes.
P312 - Call a POISON CENTER/doctor/...if you feel unwell.
P330 - Rinse mouth.
P370 + P378 - In case of fire: Use dry sand, dry chemical or alcohol resistant foam to extinguish.
P371 + P380 + P375 - In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.
P391 - Collect spillage.
P501 - Dispose of contents/container to local regulations.

3 COMPOSITION/INFORMATION OF INGREDIENTS

Ingredients:

Cas#	%	Chemical Name
3811-04-9	100%	Potassium chloride

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: Flush with large amounts of water.
Ingestion: Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

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
Hydrogen chloride gas, Potassium oxides

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

Further information
Use water to cool unopened containers.

6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:
Wear respiratory protection. Avoid dust formation. Avoid breathing dust, vapours, mist or gas. Ensure adequate ventilation.

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 and aerosols. Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs. Provide appropriate exhaust ventilation at places where dust is formed. No smoking.

Storage Requirements: Keep container tightly closed. Store in cool/dry area.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Personal Protective Equipment:

Potassium chlorate cas#:(3811-04-9) [100%]

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 and dry hands. Full contact Material: Nitrile rubber Minimum layer thickness: 0.11 mm Break through time: 480 min Material tested: Dermatril (KCL 740 / Aldrich Z677272, Size M) Splash contact data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, 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 and safety officer 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: Complete suit protecting against chemicals, 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 chlorate cas#:(3811-04-9) [100%]

9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	White Powder.
Odor:	No data available
Odor Threshold:	No data available
Solubility:	No data available
Spec Grav./Density:	2.32
Viscosity:	No data available
Boiling Point:	No data available
Freezing/Melting Pt.:	356 °C (673 °F)
Flash Point:	No data available
Partition Coefficient:	No data available
Vapor Pressure:	No data available
Vapor Density:	No data available
pH:	No data available
Evap. Rate:	No data available
Auto-Ignition Temp:	No data available
Decomp Temp:	No data available
UFL/LFL:	No data available

10 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; Strong Acids; Powdered metals; Alcohols; Organic materials

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TOXICOLOGICAL INFORMATION

Potassium chlorate cas#:(3811-04-9) [100%]

Information on toxicological effects

Acute toxicity:

Oral LD50 LD50 Oral - rat - 1,870 mg/kg

Inhalation LC50

Dermal LD50 LD50 Dermal - rabbit - > 2,000 mg/kg

Other information on acute toxicity no data available

Skin corrosion/irritation: Skin - rabbit - Mild skin irritation

Serious eye damage/eye irritation: Eyes - rabbit - Mild eye irritation

Respiratory or skin sensitisation: no data available

Germ cell mutagenicity: no data available

Carcinogenicity:

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

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: 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 Toxic if inhaled. May cause respiratory tract irritation. Ingestion Harmful if swallowed. Skin Harmful if absorbed through skin. May cause skin irritation. Eyes May cause eye irritation.

Signs and Symptoms of Exposure: anemia, 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., Nausea, Vomiting, Diarrhoea, Hemorrhage., Liver, Convulsions

Synergistic effects: no data available

Additional Information:

RTECS: FO0350000

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ECOLOGICAL INFORMATION

Potassium chlorate cas#:(3811-04-9) [100%]

Information on ecological effects

Toxicity:

Toxicity to fish LC50 - *Oncorhynchus mykiss* (rainbow trout) - 1.750 mg/l - 96.0 h.

Toxicity to daphnia EC50 - *Daphnia magna* (Water flea) - 1,093 mg/l - 24 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.

Toxic to aquatic life.

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DISPOSAL CONSIDERATIONS

Dispose of in accordance with local regulations.

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TRANSPORT INFORMATION

UN1485, Potassium chlorate, 5.1, PGII

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REGULATORY INFORMATION

Component (CAS#) [%] - CODES

Potassium chlorate (3811-04-9) [100%] MASS, PA, TSCA

Regulatory CODE Descriptions

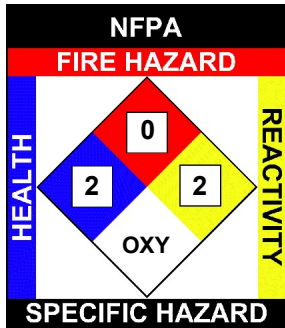
MASS = MA Massachusetts Hazardous Substances List

PA = PA Right-To-Know List of Hazardous Substances

TSCA = Toxic Substances Control Act

NFPA: Health = 2, Fire = 0, Reactivity = 2, Specific Hazard = OXY

HMIS III: Health = 2(Chronic), Fire = 0, Physical Hazard = 2



HMIS	
HEALTH	<input checked="" type="checkbox"/> 2
FLAMMABILITY	0
PHYSICAL HAZARD	2
PERSONAL PROTECTION	<input type="checkbox"/>

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