



# HI-VALLEY CHEMICAL

## LABORATORY PRODUCTS

1134 W. 850 N.      CENTERVILLE, UT 84014  
(801) 295-9591      Fax (801) 295-9448  
www.hvchemical.com

# SAFETY DATA SHEET

Hi Valley Chemical

## Potassium Hydroxide

### 1 PRODUCT AND COMPANY IDENTIFICATION

**Product Identifier:** Potassium Hydroxide  
**SDS Number:** R-029  
**Product Code:** 516411-1, 516411-5, 516411-10, 516411-20, 516411-25, 516411-30, 516411-50  
**Revision Date:** 11/10/2015  
**Version:** 1.0  
**CAS Number:** 1310-58-3  
**Supplier Details:** High Valley Products, Inc.  
1134 West 850 North  
Centerville, Utah 84014  
**Emergency:** PERS: 800-633-8253  
**Phone:** 801-295-9591  
**Email:** sales@hvchemical.com  
**Web:** www.hvchemical.com

### 2 HAZARDS IDENTIFICATION

#### Classification of the substance or mixture

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

Physical, Corrosive to Metals, 1  
Health, Acute toxicity, 4 Oral  
Health, Skin corrosion/irritation, 1 A  
Health, Serious Eye Damage/Eye Irritation, 1  
Environmental, Hazards to the aquatic environment - Acute, 3

#### GHS Label elements, including precautionary statements

**GHS Signal Word:** **DANGER**

**GHS Hazard Pictograms:**



#### GHS Hazard Statements:

H290 - May be corrosive to metals  
H302 - Harmful if swallowed  
H314 - Causes severe skin burns and eye damage  
H318 - Causes serious eye damage  
H402 - Harmful to aquatic life

#### GHS Precautionary Statements:

P234 - Keep only in original container.  
P260 - Do not breathe dust/fume/gas/mist/vapors/spray.  
P264 - Wash \_ thoroughly after handling.  
P270 - Do not eat, drink or smoke when using this product.  
P273 - Avoid release to the environment.  
P280 - Wear protective gloves/protective clothing/eye protection/face protection.  
P301+312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.  
P301+330+331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
P303+361+353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

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 continuously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.  
P310 - Immediately call a POISON CENTER or doctor/physician.  
P321 - Specific treatment (see \_ on this label).  
P363 - Wash contaminated clothing before reuse.  
P390 - Absorb spillage to prevent material damage.  
P405 - Store locked up.  
P406 - Store in a corrosive resistant/\_ container with a resistant inner liner.  
P501 - Dispose of contents/container to \_

### 3 COMPOSITION/INFORMATION ON INGREDIENTS

#### Ingredients:

Cas#	%	Chemical Name
1310-58-3		Potassium hydroxide

### 4 FIRST AID MEASURES

**Inhalation:** If inhaled, move person to fresh air. If not breathing, give artificial respiration. Consult a physician.  
**Skin Contact:** Promptly flush skin with water until all chemical is removed.  
Remove contaminated clothing and wash before reuse.  
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.  
Consult a physician.  
**Ingestion:** Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

### 5 FIRE FIGHTING MEASURES

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 dust formation. 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:**  
Clean up without creating dust. Keep in suitable, closed containers for disposal.

### 7 HANDLING AND STORAGE

**Handling Precautions:** Avoid formation of dust. Avoid breathing vapors or mist. Avoid contact with eyes, skin, or clothing. Use personal protective equipment. Always ensure adequate ventilation. Wash hands thoroughly after handling.  
**Storage Requirements:** Store in cool/dry well ventilated area. Keep container tightly closed.

## 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

### Personal Protective Equipment:

Potassium hydroxide (1310-58-3) []

Personal protective equipment

Eye/face protection: Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin 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: Material: Nitrile rubber Minimum layer thickness: 0.11 mm Break through time: 480 min Material tested: Dermatril (KCL 740 / Aldrich Z677272, Size M) 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.

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.

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).

Control of environmental exposure: Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

Potassium hydroxide (1310-58-3) []

Components with workplace control parameters

C 2 mg/m<sup>3</sup> USA. ACGIH Threshold Limit Values (TLV)

Eye, skin, & Upper Respiratory Tract irritation

C 2 mg/m<sup>3</sup> USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000

C 2 mg/m<sup>3</sup> USA. NIOSH Recommended Exposure Limits

## 9 PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	White flakes
<b>Physical State:</b>	Solid
<b>Odor:</b>	No data available
<b>Odor Threshold:</b>	No data available
<b>Solubility:</b>	No data available
<b>Spec Grav./Density:</b>	2.044

<b>Viscosity:</b>	No data available
<b>Boiling Point:</b>	1,320 °C (2,408 °F)
<b>Freezing/Melting Pt.:</b>	Melting point/range: 361 °C (682 °F) - lit.
<b>Flash Point:</b>	No data available
<b>Partition Coefficient:</b>	No data available
<b>Vapor Pressure:</b>	1 hPa (1 mmHg) at 719 °C (1,326 °F); 1 hPa (1 mmHg) at 714 °C (1,317 °F)
<b>Vapor Density:</b>	No data available
<b>pH:</b>	13.5
<b>Evap. Rate:</b>	No data available
<b>Auto-Ignition Temp:</b>	No data available
<b>Decomp Temp:</b>	No data available
<b>UFL/LFL:</b>	No data available

## 10 STABILITY AND REACTIVITY

<b>Reactivity:</b>	No data available
<b>Chemical Stability:</b>	Heat of solution is very high, and with limited amounts of water, violent boiling may occur Stable under recommended storage conditions.
<b>Conditions to Avoid:</b>	Do not heat above melting point.
<b>Materials to Avoid:</b>	Nitro compounds, Organic materials, Magnesium, Copper, Water, reacts violently with:, Metals, Light metals, Contact with aluminum, tin and zinc liberates hydrogen gas. Contact with nitromethane and other similar nitro compounds causes formation of shock-sensitive salts., vigorous reaction with:, Alkali metals, Halogens, Azides, Anhydrides
<b>Hazardous Decomposition:</b>	No data available

## 11 TOXICOLOGICAL INFORMATION

Potassium hydroxide (1310-58-3) []

Information on toxicological effects

Acute toxicity:

LD50 Oral - rat - 333 mg/kg

Inhalation: no data available

Dermal: no data available

Skin corrosion/irritation: Skin - rabbit Result: Severe skin irritation - 24 h

Serious eye damage/eye irritation: Eyes - rabbit Result: Corrosive to eyes (OECD Test Guideline 405)

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

Specific target organ toxicity - single exposure: no data available

Specific target organ toxicity - repeated exposure: no data available

Aspiration hazard: no data available

Additional Information:

RTECS: TT2100000

## 12 ECOLOGICAL INFORMATION

Potassium hydroxide (1310-58-3) []

Information on ecological effects

Toxicity:

Toxicity to fish LC50 - *Gambusia affinis* (Mosquito fish) - 80 mg/l - 96 h.

Persistence and degradability: The methods for determining the biological degradability are not applicable to inorganic substances.

Bioaccumulative potential: no data available

Mobility in soil: no data available

Results of PBT and vPvB assessment PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

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

no data available

## 13 DISPOSAL CONSIDERATIONS

Potassium hydroxide (1310-58-3) []

Waste treatment methods

Contact a licensed professional waste disposal service to dispose of this material. D

Contaminated packaging: Dispose of as unused product.

## 14 TRANSPORT INFORMATION

UN1813, Potassium hydroxide, solid, 8, PGII

## 15 REGULATORY INFORMATION

Component (CAS#) [%] - CODES

RQ(1000LBS), Potassium hydroxide (1310-58-3) [n/a%] CERCLA, CSWHS, MASS, OSHAWAC, PA, TSCA, TXAIR

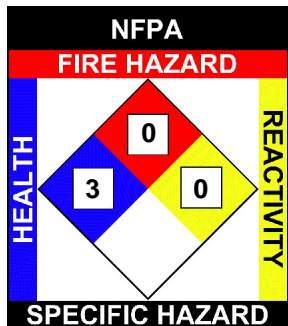
Regulatory CODE Descriptions

RQ = Reportable Quantity  
CERCLA = Superfund clean up substance  
CSWHS = Clean water Act Hazardous substances

MASS = MA Massachusetts Hazardous Substances List  
OSHAWAC = OSHA Workplace Air Contaminants  
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 = 3, Fire = 0, Reactivity = 0, Specific Hazard = n/a  
HMIS III: Health = 3, Fire = 0, Physical Hazard = 0



HMIS	
HEALTH	<input type="checkbox"/> 3
FLAMMABILITY	<input type="checkbox"/> 0
PHYSICAL HAZARD	<input type="checkbox"/> 0
PERSONAL PROTECTION	<input type="checkbox"/>

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