



# 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

## Phosphoric Acid 75%

### 1 PRODUCT AND COMPANY IDENTIFICATION

**Product Identifier:** Phosphoric Acid 75%  
**Synonyms:** Orthophosphoric acid  
**SDS Number:** R-010  
**Product Code:** 516071-PT, 516071-QT, 516071-1, 516071-5, 516071-55  
**Revision Date:** 9/11/2015  
**Version:** 1.0  
**CAS Number:** 7664-38-2  
**Chemical Family:** Acid  
**Chemical Formula:** H<sub>3</sub>PO<sub>4</sub>  
**Product Use:** Strengthening or fortifying weak phosphoric acid solutions. Polymerization of propylene; alkylating catalyst  
**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):

Health, Serious Eye Damage/Eye Irritation, 1  
Health, Skin corrosion/irritation, 1 B  
Physical, Corrosive to Metals, 1

#### GHS Label elements, including precautionary statements

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

**GHS Hazard Pictograms:**



#### GHS Hazard Statements:

H318 - Causes serious eye damage  
H314 - Causes severe skin burns and eye damage  
H290 - May be corrosive to metals

#### GHS Precautionary Statements:

P234 - Keep only in original container.  
P264 - Wash \_ thoroughly after handling.  
P280 - Wear protective gloves/protective clothing/eye protection/face protection.  
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
7664-38-2	75%	Phosphoric acid
7732-18-5	25%	Water

### 4 FIRST AID MEASURES

- Inhalation:** Administer oxygen if breathing is difficult. Do not use mouth-to-mouth method if victim inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Give artificial respiration if victim is not breathing. Move victim to fresh air.
- Skin Contact:** Promptly flush skin with water until all chemical is removed. Remove and isolate contaminated clothing and shoes. Wash contaminated clothing before reuse.
- Eye Contact:** Immediately flush eyes with large amounts of water for at least 15 minutes, lifting eyelids occasionally to facilitate irrigation.  
Get immediate medical attention.
- Ingestion:** DO NOT INDUCE VOMITING. Give large quantities of water. Never give anything by mouth to an unconscious person. Get medical attention immediately.  
Do not use mouth-to-mouth method if victim ingested the substance. Do not leave victim unattended. To prevent aspiration of swallowed product, lay victim on side with head lower than waist. Persons attending the victim should avoid direct contact with heavily contaminated clothing and vomitus. Wear impervious gloves while decontaminating skin and hair.

### 5 FIRE FIGHTING MEASURES

Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes. Oxides of phosphorus.

#### Advice for firefighters:

Wear positive pressure self-contained breathing apparatus (SCBA).  
Wear chemical protective clothing that is specifically recommended by the manufacturer. It may provide little or no thermal protection. Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations where direct contact with the substance is possible. Keep unauthorized personnel away.  
Evacuate residents who are downwind of fire. Dike area to prevent runoff and contamination of water sources. Dispose of fire control water later. Persons who may have been exposed to contaminated smoke should be immediately examined by a physician and checked for symptoms of poisoning. The symptoms should not be mistaken for heat exhaustion or smoke inhalation.

### 6 ACCIDENTAL RELEASE MEASURES

#### Personal precautions, protective equipment and emergency procedures:

Wear respiratory protection. Avoid breathing vapours, 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:

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

### 7 HANDLING AND STORAGE

**Handling Precautions:** Avoid breathing vapors or mist. Avoid contact with eyes, skin, or clothing.

**Storage Requirements:** Store in cool/dry area.

<b>Engineering Controls:</b>	Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.
<b>Personal Protective Equipment:</b>	Phosphoric acid (7664-38-2) [75%]  Personal protective equipment  Eye/face protection: Tightly fitting safety goggles. Faceshield (8-inch minimum). 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: Dermatrill (KCL 740 / Aldrich Z677272, Size M)  Splash contact: Material: Nitrile rubber Minimum layer thickness: 0.11 mm Break through time: 480 min Material tested: Dermatrill (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 respirator with multi- purpose combination (US) or type ABEK (EN 14387) 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: Do not let product enter drains.

### Phosphoric acid (7664-38-2) [75%]

#### Components with workplace control parameters

TWA	1 mg/m3	USA. ACGIH Threshold Limit Values (TLV)
Eye, skin, & Upper Respiratory Tract irritation		
STEL	3 ppm	USA. ACGIH Threshold Limit Values (TLV)
Eye, skin, & Upper Respiratory Tract irritation		
TWA	1 mg/m3	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
TWA	1 mg/m3	USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000
STEL	3 mg/m3	USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000
TWA	1 mg/m3	USA. NIOSH Recommended

Exposure Limits

ST 3 mg/m3 USA. NIOSH Recommended Exposure Limits

**9 PHYSICAL AND CHEMICAL PROPERTIES**

<b>Appearance:</b>	Colorless	<b>Odor:</b>	Odorless
<b>Physical State:</b>	Liquid	<b>Molecular Formula:</b>	H3PO4
<b>Odor Threshold:</b>	No data available	<b>Solubility:</b>	Miscible
<b>Spec Grav./Density:</b>	1.685	<b>Freezing/Melting Pt.:</b>	No data available
<b>Viscosity:</b>	No data available	<b>Flash Point:</b>	No data available
<b>Boiling Point:</b>	No data available	<b>Vapor Density:</b>	No data available
<b>Partition Coefficient:</b>	No data available	<b>Auto-Ignition Temp:</b>	No data available
<b>Vapor Pressure:</b>	No data available	<b>UFL/LFL:</b>	No data available
<b>pH:</b>	<1		
<b>Evap. Rate:</b>	No data available		
<b>Decomp Temp:</b>	No data available		

**10 STABILITY AND REACTIVITY**

<b>Reactivity:</b>	No dangerous reaction under normal conditions.
<b>Chemical Stability:</b>	Stable under normal conditions.
<b>Conditions to Avoid:</b>	Incompatible materials
<b>Materials to Avoid:</b>	Strong Oxidizing Agents. Strong Reducing agents bases and certain metals;
<b>Hazardous Decomposition:</b>	Oxides of phosphorus.

Phosphoric acid (7664-38-2) [75%]

Information on toxicological effects

Acute toxicity: no data available

Inhalation: no data available

Dermal: no data available

Skin corrosion/irritation: no data available

Serious eye damage/eye irritation: no data available

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: Not available

burning sensation, Cough, wheezing, laryngitis, Shortness of breath, spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema, Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin.

Stomach - Irregularities - Based on Human Evidence

Stomach - Irregularities - Based on Human Evidence (Phosphoric acid)

RTECS: ZC0110000

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Phosphoric acid (7664-38-2) [75%]

Information on ecological effects

Toxicity: no data available

Persistence and degradability: no data available

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: no data available

Water (7732-18-5) [25%]

Information on ecological effects

Toxicity: no data available

Persistence and degradability: not applicable

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: no data available

## **13** **DISPOSAL CONSIDERATIONS**

Phosphoric acid (7664-38-2) [75%]

Waste treatment methods

Product: Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging: Dispose of as unused product.

## **14** **TRANSPORT INFORMATION**

UN1805, Phosphoric acid solution, 8, PGIII

Component (CAS#) [%] - CODES

RQ(5000LBS), Phosphoric acid (7664-38-2) [n/a%] CERCLA, CSWHS, EPCRAWPC, MASS, NJHS, OSHAWAC, SARA313, TSCA, TXAIR

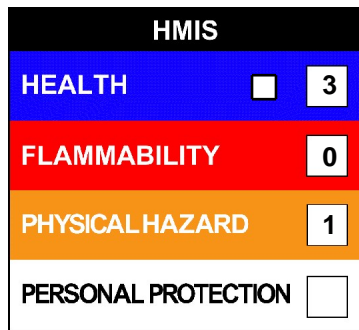
Water (7732-18-5) [25%] TSCA

Regulatory CODE Descriptions

-----  
 RQ = Reportable Quantity  
 CERCLA = Superfund clean up substance  
 CSWHS = Clean Water Act Hazardous substances  
 EPCRAWPC = EPCRA water Priority Chemicals  
 MASS = MA Massachusetts Hazardous Substances List  
 NJHS = NJ Right-to-Know Hazardous Substances  
 OSHAWAC = OSHA workplace Air Contaminants  
 SARA313 = SARA 313 Title III Toxic Chemicals  
 TSCA = Toxic Substances Control Act  
 TXAIR = TX Air Contaminants with Health Effects Screening Level

NFPA: Health = 3, Fire = 0, Reactivity = 1, Specific Hazard = n/a

HMIS III: Health = 3, Fire = 0, Physical Hazard = 1



**Disclaimer:**

Although reasonable care has been taken in the preparation of this document, we extend no warranties and make no representations as to the accuracy or completeness of the information contained herein, and assume no responsibility regarding the suitability of this information for the user's intended purposes or for the consequences of its use. Each individual should make a determination as to the suitability of the information for their particular purpose(s).

**Author:** HVC

**Publication Date:** 9/11/15

**Revision No.** 01