



HI-VALLEY CHEMICAL
LABORATORY PRODUCTS

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SAFETY DATA SHEET

Hi Valley Chemical

Nitric Acid 54 - 70%

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 Liquids, 3
Health, Skin corrosion/irritation, 1 A
Health, Serious Eye Damage/Eye Irritation, 1

GHS Label Elements, Including Precautionary Statements

GHS Signal Word: **DANGER**

GHS Hazard Pictograms:



GHS Hazard Statements:

H272 - May intensify fire; oxidizer
H314 - Causes severe skin burns and eye damage
H318 - Causes serious eye damage

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.
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 first aid on this label).
P363 - Wash contaminated clothing before reuse.
P370+378 - In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.
P405 - Store locked up.
P501 - Dispose of contents/container according to local regulations.

3 COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients:

Cas#	%	Chemical Name
7697-37-2		Nitric acid

4 FIRST AID MEASURES

Inhalation:	If inhaled, move person to fresh air. If not breathing, give artificial respiration. Consult a physician.
Skin Contact:	Remove contaminated clothing immediately. 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. Give large quantities of water. Never give anything by mouth to an unconscious person. Get medical attention immediately.

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
Nitrogen Oxides (NOx)

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

Further information
Use water spray to cool unopened containers.

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:
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. Keep away from sources of ignition. Precautions for safe handling: See section 8 for recommendations on the use of personal protective equipment.
Storage Requirements:	Keep container tightly closed. Store in cool/dry and well ventilated area. Protect container and its fittings from physical damage.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Personal Protective Equipment:	Nitric acid (7697-37-2) [] 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).
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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: Fluorinated rubber Minimum layer thickness: 0.7 mm Break through time: 480 min Material tested: Vitoject (KCL 890 / Aldrich Z677698, Size M)

Splash contact: Material: Nature latex/chloroprene Minimum layer thickness: 0.6 mm Break through time: 120 min Material tested: Lapren (KCL 706 / Aldrich Z677558, 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.

Nitric acid (7697-37-2) []

Components with workplace control parameters

TWA 2 ppm USA. ACGIH Threshold Limit Values (TLV)

Eye & Upper Respiratory Tract irritation
Dental erosion

STEL 4 ppm USA. ACGIH Threshold Limit Values (TLV)

Eye & Upper Respiratory Tract irritation
Dental erosion

ST 4 ppm USA. NIOSH Recommended Exposure Limits
10 mg/m³

TWA 2 ppm USA. NIOSH Recommended Exposure Limits
5 mg/m³

TWA 2 ppm USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
5 mg/m³

The value in mg/m³ is approximate.

TWA 2 ppm USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000
5 mg/m³

STEL 4 ppm USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000
10 mg/m³

Appearance: Colorless liquid.

Physical State:	Liquid
Odor:	Suffocating, acrid
Odor Threshold:	No data available
Solubility:	Infinitely soluble
Spec Grav./Density:	1.41
Viscosity:	No data available
Percent Volatile:	100 (as water and acid) @ 21 °C (70 °F)
Heat Value:	No data available
Boiling Point:	122 °C (252 °F)
Freezing/Melting Pt.:	-42 °C (-44 °F)
Flammability:	No data available.
Flash Point:	No data available
Partition Coefficient:	No data available
Octanol:	No data available
Vapor Pressure:	48 @ 20 °C (68 °F)
Vapor Density:	2-3
pH:	1.0 (0.1M solution)
VOC:	No data available
Evap. Rate:	No data available.
Bulk Density:	No data available
Molecular weight:	63.01
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:	Isolate from heat, & open flame.
Materials to Avoid:	Strong Bases; metallic powders; carbides; hydrogen sulfide; turpentine; and combustible organics
Hazardous Decomposition:	Nitrogen oxides and hydrogen nitrate. Will react with water or steam to product heat and toxic and corrosive fumes.
Hazardous Polymerization:	Will not occur.

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TOXICOLOGICAL INFORMATION

Nitric acid (7697-37-2) []

Information on toxicological effects

Acute toxicity: 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

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., Inhalation may provoke the following symptoms:, spasm, inflammation and edema of the bronchi, spasm, inflammation and edema of the larynx, pneumonitis, pulmonary edema, Symptoms and signs of poisoning are:, burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache, Nausea, Vomiting, Pulmonary edema. Effects may be delayed., Large doses may cause: conversion of hemoglobin to methemoglobin, producing cyanosis; marked fall in blood pressure, leading to collapse, coma, and possibly death.

Liver - Irregularities - Based on Human Evidence

Liver - Irregularities - Based on Human Evidence (Nitric acid)

12 ECOLOGICAL INFORMATION

Nitric acid (7697-37-2) []

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

13 DISPOSAL CONSIDERATIONS

Dispose of in accordance with local regulations.

14 TRANSPORT INFORMATION

UN2031, Nitric acid other than red fuming, with at least 65 percent, but not more than 70 percent nitric acid, 8,(5.1), PGII

15 REGULATORY INFORMATION

Component (CAS#) [%] - CODES

RQ(1000LBS), Nitric acid (7697-37-2) [n/a%] CERCLA, CSWHS, EHS302, EPCRAWPC, MASS, NJEHS, NJHS, OSHAPSM, OSHAWAC, PA, SARA313, TSCA, TXAIR

Regulatory CODE Descriptions

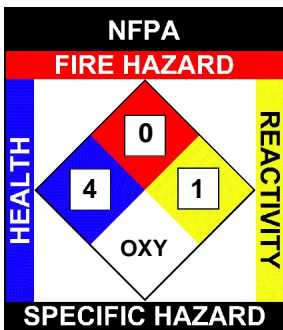
RQ = Reportable Quantity
CERCLA = Superfund clean up substance
CSWHS = Clean water Act Hazardous substances
EHS302 = Extremely Hazardous Substance
EPCRAWPC = EPCRA water Priority Chemicals
MASS = MA Massachusetts Hazardous Substances List
NJEHS = NJ Extraordinarily Hazardous Substances
NJHS = NJ Right-to-Know Hazardous Substances
OSHAPSM = OSHA Chemicals Requiring process safety management
OSHAWAC = OSHA workplace Air Contaminants
PA = PA Right-To-Know List of Hazardous Substances
SARA313 = SARA 313 Title III Toxic Chemicals
TSCA = Toxic Substances Control Act
TXAIR = TX Air Contaminants with Health Effects Screening Level

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OTHER INFORMATION

NFPA Health = 4, Fire = 0, Reactivity = 1, Specific Hazard = OXY

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Disclaimer:

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