



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

Ammonium Hydroxide >20%

1 PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: Ammonium Hydroxide >20%
Synonyms: Aqua ammonia, ammonia, strong ammonia
SDS Number: R-008
Product Code: 511561-pt, 511561-qt, 511561-1, 511561-5, 511561-55
Revision Date: 8/14/2015
Version: 1.0
Chemical Family: Alkali (Inorganic Base)
Chemical Formula: NH4OH
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 A
- Environmental, Hazards to the aquatic environment - Acute, 1
- Environmental, Hazards to the aquatic environment - Chronic, 1
- Health, Acute toxicity, 4 Oral

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
- H400 - Very toxic to aquatic life
- H410 - Very toxic to aquatic life with long lasting effects
- H302 - Harmful if swallowed

GHS Precautionary Statements:

- 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.
P391 - Collect spillage.
P405 - Store locked up.
P501 - Dispose of contents/container to local regulations.

3 COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients:

Cas#	%	Chemical Name
7732-18-5	70-80%	Water
1336-21-6	20-30%	Ammonium hydroxide

4 FIRST AID MEASURES

Inhalation: If inhaled, move person to fresh air. If not breathing, give artificial respiration. Consult a physician. If the heart has stopped, trained personnel should immediately begin cardiopulmonary resuscitation (CPR)

Skin Contact: Remove contaminated clothing immediately. Wash with soap and water.

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: Rinse mouth with water. 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:
Dry powder, carbon dioxide.

Special Fire Fighting Procedures:

Water spray may be ineffective on fire but can protect fire-fighters & cool closed containers. Use fog nozzles if water is used. Do not enter confined fire-space without full bunker gear. (Helmet with face shield, bunker coats, gloves & rubber boots). Use NIOSH approved positive pressure self-contained breathing apparatus.

Unusual Explosion and Fire Procedures

Isolate from oxidizers, acids, heat, & open flame. Closed containers may explode if exposed to extreme heat. Applying to hot surfaces requires special precautions.

6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

For personal protection see section 8.

Environmental precautions

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

Containment and clean 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 contact with eyes, skin, or clothing. Avoid breathing vapors or mist.

Storage Requirements:

Store in cool/dry well ventilated area.
 Store above 38°C / 100°F.
 Keep container tightly closed & upright when not in use to prevent leakage.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Personal Protective Equipment:

Ammonium hydroxide (1336-21-6) [20-30%]

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.

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

Exposure Guidelines:

Ammonium hydroxide (1336-21-6) [20-30%] : no data available

9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Colorless liquid. Physical State: Liquid Odor Threshold: No data available Spec Grav./Density: 0.967 Viscosity: No data available Boiling Point: 100 °C / 212 °F Flammability: Non combustilbe. Partition Coefficient: No data available Vapor Pressure: 51.3 pH: No data available Evap. Rate: 0.254 Decomp Temp: No data available	Odor: Ammonia Molecular Formula: NH4OH Solubility: Complete in water Freezing/Melting Pt.: No data available Flash Point: No data available Vapor Density: 0.768 VOC: 0.0 Vol% /0.0g/L / 0.000 lbs/Gal Auto-Ignition Temp: No data available UFL/LFL: No data available
---	--

10 STABILITY AND REACTIVITY

Chemical Stability: Conditions to Avoid: Materials to Avoid: Hazardous Decomposition: Hazardous Polymerization:	Stable under normal conditions. Isolate from heat, & open flame. Strong Oxidizing Agents. Strong Acids; Nitrogen oxides, and ammonia vapors from heating. Will not occur.
--	---

Ammonium hydroxide (1336-21-6) [20-30%]

Information on toxicological effects

Acute toxicity:

LD50 Oral - rat - 350 mg/kg (Ammonium hydroxide) Remarks: Gastrointestinal:Other changes. Liver:Other changes. Kidney, Ureter, Bladder:Other changes.

Inhalation: no data available

Dermal: no data available (Ammonium hydroxide)

Skin corrosion/irritation: no data available

Serious eye damage/eye irritation: Eyes - rabbit (Ammonium hydroxide) Result: Severe eye irritation

Respiratory or skin sensitisation: no data available (Ammonium hydroxide)

Germ cell mutagenicity: no data available (Ammonium hydroxide)

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 (Ammonium hydroxide)

Specific target organ toxicity - single exposure: no data available (Ammonium hydroxide)

Specific target organ toxicity - repeated exposure: no data available

Aspiration hazard: no data available (Ammonium hydroxide)

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. (Ammonium hydroxide)

Ammonium hydroxide (1336-21-6) [20-30%]

Information on ecological effects

Toxicity:

Toxicity to fish mortality NOEC - Oncorhynchus tshawytscha - 3.5 mg/l - 3.0 d (Ammonium: hydroxide)

Toxicity to daphnia and LC50 - Daphnia magna (Water flea) - 32 mg/l - 50 h (Ammonium hydroxide): other aquatic invertebrates

Persistence and degradability: no data available

Bioaccumulative potential: no data available

Mobility in soil: no data available (Ammonium hydroxide)

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. Very toxic to aquatic life.

13 DISPOSAL CONSIDERATIONS

Ammonium hydroxide (1336-21-6) [20-30%]

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

UN2672, Ammonia solutions, relative density between 0.880 and 0.957 at 15 degrees C in water, with more than 10 percent but not more than 35 percent ammonia, 8, PGIII

15 REGULATORY INFORMATION

Component (CAS#) [%] - CODES

Water (7732-18-5) [70-80%] TSCA

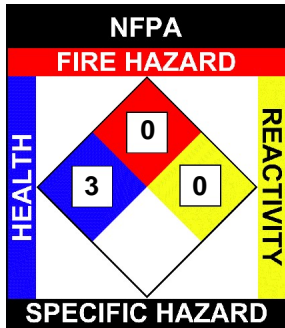
RQ(1000LBS), Ammonium hydroxide (1336-21-6) [20-30%] CERCLA, CSWHS, MASS, NJEHS, PA, TSCA

Regulatory CODE Descriptions

RQ = Reportable Quantity
TSCA = Toxic Substances Control Act
CERCLA = Superfund clean up substance
CSWHS = Clean Water Act Hazardous Substances
MASS = MA Massachusetts Hazardous Substances List
NJEHS = NJ Extraordinarily Hazardous Substances
PA = PA Right-To-Know List of Hazardous Substances

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"/>

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: 8/14/15

Revision No. 1.0