

1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product Name: Ammonium Hydroxide 28-30%, ACS NH4OH FW 35.05

Part Number: 1006

CAS-No.: Not applicable

SDS Number: 2320

1.2 Recommended Use: Laboratory Chemicals

1.3 Company: Newcomer Supply
2505 Parview Road
Middleton, WI 53562 USA

Telephone: 1-800-383-7799

Fax: 1-608-831-0866

Website: www.newcomersupply.com

Email: newly@newcomersupply.com

24 HOUR EMERGENCY CONTACT
CALL CHEMTREC: 1-800-424-9300
Contact CHEMTREC only in the event of an emergency involving a chemical spill, leak, fire, exposure or other accident.

2. HAZARD(S) IDENTIFICATION

2.1 Classification of the substance or mixture

GHS Classification, (in accordance with 29 CFR1910.1200)

Corrosive to metals, Category 1

Skin corrosion, Category 1B

Serious eye damage, Category 1

Acute toxicity (oral), Category 4

2.2 GHS Label elements

Signal Word DANGER

Pictogram



Hazard Statement(s):

- May be corrosive to metals
- Causes severe skin burns and eye damage
- Causes serious eye damage
- May be harmful if swallowed

Precautionary Statement(s):

Prevention:

- Keep only in original container
- Do not breathe dust/fume/gas/mist/vapours/spray
- Wash skin thoroughly after handling
- Wear protective gloves/protective clothing/eye protection/face protection
- Do not eat, drink or smoke when using this product

Response:

- Absorb spillage to prevent material damage.
- IF SWALLOWED: Rinse mouth. Do NOT induce vomiting
- IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse
- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
- Immediately call a POISON CENTER or doctor/physician
- Specific treatment: see first aid measures in section 4
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing
- Rinse mouth
- IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
- Wash contaminated clothing before reuse

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Storage:

- Store locked up.
- Store in a corrosive resistant container/container with a resistant inner liner.

Disposal:

- Dispose of contents/ container to an approved waste disposal plant.

2.3 Description of any hazards not otherwise classified None

2.4 >1% of mixture with unknown acute toxicity None

3. COMPOSITION/INFORMATION ON INGREDIENTS
**3.2 Mixture
Hazardous Components**

Component		Concentration
Name	Ammonium Hydroxide	
CAS-No.	1336-21-6	28-30%

4. FIRST-AID MEASURES
4.1 Description of necessary measures
Inhalation (breathing)

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.

Skin Contact

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. Immediately call a POISON CENTER or doctor/physician.

Eye Contact

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Immediately call a POISON CENTER or doctor/physician.

Ingestion (swallowed)

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.

4.2 Most important symptoms and or effects, acute and delayed

The most important symptoms/effects are presented in Section 2 and or Section 11.

4.3 Indication of any immediate medical attention and special treatment needed

No data available

5. FIRE-FIGHTING MEASURES
5.1 Suitable extinguishing media

Carbon dioxide, dry chemical, water spray, alcohol-resistant foam.

5.2 Specific hazards arising from the substance or mixture

No data available

5.3 Protective equipment and precautions for fire-fighters

Wear a positive-pressure self-contained breathing apparatus if necessary. Wear chemical resistant clothing as recommended by clothing manufacturer.

NFPA Rating

Health	Fire	Reactivity
hazard: 3	hazard: 1	hazard: 0

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6. ACCIDENTAL RELEASE MEASURES
6.1 Personal precautions, protective equipment and emergency procedures

Apply personal protective equipment (see Section 8). Use in a properly ventilated area. Avoid breathing vapors. Avoid skin contact. Avoid eye contact. Wash hands after use. In case of large spill, remove personnel to a safe area.

6.2 Methods and material for containment and cleaning up

Apply personal protective equipment (see Section 8). Contain spill. Prevent further leakage if possible and safe to do so. Ensure proper ventilation. For small amounts, wipe or absorb spill using inert material and dispose of according to local regulations. For large amounts, evacuate area and limit access. Prevent entry of material into sewage drains and confined areas. Dispose of any contaminated materials according to local regulations.

7. HANDLING AND STORAGE
7.1 Precautions for safe handling

Do not breathe dust/fume/gas/mist/vapours/spray. Do not get in eyes, on skin, or on clothing.

7.2 Conditions for safe storage, including any incompatibilities

Refer to Section 2.2 for proper storage temperature. Store the tightly closed container in a cool, dry, well-ventilated area.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION
8.1 Control Parameters

Components with limit values that require monitoring at the workplace

Component	CAS-No.	Regulatory	Value	Parameters
Ammonium Hydroxide	1310-73-2	OSHA PEL	TWA	50 ppm
		NIOSH REL	TWA	25 ppm
		NIOSH REL	STEL	35 ppm
		ACGIH TLV	TWA	25 ppm
		ACGIH TLV	STEL	35 ppm

8.2 Exposure Controls
Appropriate engineering controls

Use in a properly ventilated area. Remove/wash before reuse contaminated clothing. Wash hands upon exiting work premises. Use product in an appropriately designated fume hood. Take measures to keep concentrations below acceptable limits.

8.3 Personal Protective Equipment
Eye/Face protection

Wear chemical safety goggles and/or a full face shield if splashing is possible. Keep eye wash fountain nearby.

Skin Protection

Wear chemical-resistant gloves. Gloves should be resistant to components of product. Refer to glove manufacturer for appropriate type and glove thickness.

Body Protection

No data available

Respiratory Protection

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Respirators should only be used if the employer has implemented a written program that takes into account workplace conditions, requirements for worker training, respirator fit testing, and medical exams, as described in the OSHA Respiratory Protection Standard (29 CFR 1910.134).

Where the potential exists for exposure over 25 ppm: use a NIOSH approved full facepiece respirator with an acid gas cartridge which is specifically approved for ammonium hydroxide.

Where the potential for high exposure exists, use a NIOSH approved supplied-air respirator with a full facepiece operated in a pressure-demand or other positive pressure mode. For increased protection use in combination with an auxiliary self-contained breathing apparatus or an emergency escape air cylinder.

In case of emergency, entry into or escape from unknown concentrations, select the highest level approved respiratory protection available.

Other Information

None

9. PHYSICAL AND CHEMICAL PROPERTIES
9.1 Information on basic physical and chemical properties

Physical state	Colorless liquid
Odor	Pungent ammonia odor
Odor threshold	No data available
pH	No data available
Melting point/freezing point	ca. -72°C (ca. -98°F)
Initial boiling point and boiling range	ca. 36°C (ca. 97°F)
Flash point	No data available
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Upper flammability or explosive limits	25%
Lower flammability or explosive limits	16%
Vapor pressure	No data available
Vapor density	No data available
Relative density	~0.9
Solubility(ies)	Water soluble
Partition coefficient: n-octanol/water	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available

10. STABILITY AND REACTIVITY
10.1 Reactivity

No data available

10.2 Chemical stability

Stable in a closed container within label-specified storage temperature and expiration date.

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

No data available

10.5 Incompatible materials

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Ammonium hydroxide reacts with many heavy metals (such as silver, copper, lead and zinc) and their salts to form explosive compounds and flammable and explosive hydrogen gas. Ammonium hydroxide may react violently with strong acids (such as hydrochloric, sulfuric and nitric); dimethyl sulfate; and halogens. Ammonium hydroxide will react with strong bases (such as sodium hydroxide and potassium hydroxide) to produce ammonia gas. Do not use copper, aluminum or galvanized metals when handling ammonium hydroxide

10.6 Hazardous decomposition products

No data available

11. TOXICOLOGICAL INFORMATION**11.1 Information on toxicological effects****Inhalation exposure**

No data available

Oral exposure

No data available

Dermal exposure

No data available

Skin corrosion/irritation

Ammonium hydroxide: Contact can severely irritate and burn the skin.

Serious eye damage/irritation

Ammonium hydroxide: Contact can severely irritate and burn the eyes.

Respiratory or skin sensitization

No data available

Germ Cell mutagenicity

No data available

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

Acute toxicity

Ammonium Hydroxide:

LD50 rat oral 350 mg/kg

Carcinogenicity

IARC: None of the components are listed

NTP: None of the components are listed

OSHA: None of the components are listed

Additional information

RTECS: No data available

12. ECOLOGICAL INFORMATION

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12.1 Ecotoxicity

No data available

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Other adverse effects

No data available

13. DISPOSAL CONSIDERATIONS
13.1 Waste disposal methods
Contents

Dispose of contents in a safe manner to comply with local, state and federal regulations. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging

Dispose of packaging in a safe manner to comply with local, state and federal regulations. Contact a licensed professional waste disposal service to dispose of this material.

14. TRANSPORT INFORMATION
14.1 DOT (US)

UN-Number	2672
Proper shipping name	Ammonia solutions
Hazard class	8
Packing group	III
Environmental hazards	No data available

15. REGULATORY INFORMATION
15.1 No data available

16. OTHER INFORMATION

Preparation Information

Newcomer Supply Inc.

800-383-7799

www.newcomersupply.com

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