

Safety Data Sheet

Classified According to Canada Hazardous Product Regulations SOR/2015-17 (HPR 2022)

SECTION 1: Identification

1.1. Product Identifier

Trade Name or Designation Aluminum Hydroxide Suspension, for Chloride Determination in Highly Colored Samples

Product Number 580

Other Identifying Product Numbers 580-16

1.2. Recommended Use and Restrictions on Use

General Laboratory Reagent

1.3. Details of the Supplier of the Safety Data Sheet

Company Ricca Chemical Company

Address 412 West Fork Drive

Arlington, TX 76012 USA

Telephone 888-467-4222

1.4. Emergency Telephone Number (24 hours)

CHEMTREC (USA) 800-424-9300

CHEMTREC (International) 1+ 703-527-3887

1.5. Distributor Address

Ricca Chemical Company

412 West Fork Drive

Arlington, TX 76012 USA

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SECTION 2: Hazard Identification

2.1. Classification of the Hazardous Product

Hazard Class	Category	Hazard Statements	Precautionary Statements
Skin Corrosion / Irritation	Category 2	H315	P264,P280,P302+P352,P321, P332+P313,P362+P364
Serious Eye Damage / Eye Irritation	Category 2	H319	P264,P280,P305+P351+P338, P337+P313
Hazardous to the Aquatic Environment, Short-term (Acute)	Acute 3	H402	P273,P501

2.2. GHS Label Elements

Pictograms:



Signal Word: **Warning**

Hazard Statements:

NOTE: Hazard statements may be combined on labels to improve clarity and readability.

Hazard Number	Hazard Statement
H315	Causes skin irritation
H319	Causes serious eye irritation
H402	Harmful to aquatic life

Precautionary Statements:

NOTE: Precautionary statements may be combined or consolidated on labels to improve clarity and readability.

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Prevention

Precautionary Number	Precautionary Statement
P264	Wash hands, arms, and face thoroughly after handling.
P273	Avoid release to the environment.
P280	Wear protective gloves and eye protection.

Response

Precautionary Number	Precautionary Statement
P302+P352	IF ON SKIN: Wash with plenty of water.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P332+P313	If skin irritation occurs: Get medical advice or attention.
P337+P313	If eye irritation persists: Get medical advice or attention.
P362+P364	Take off contaminated clothing and wash it before reuse.

Disposal

Precautionary Number	Precautionary Statement
P501	Dispose of contents/container to suitable waste stream in accordance with local, state, federal, and international regulations.

2.3. Hazards not Otherwise Classified

No other hazards identified.

2.4. Ingredients of Unknown Acute Toxicity

11.8 percent of this mixture consists of ingredient(s) of unknown acute oral toxicity. 1.2 percent of this mixture consists of ingredient(s) of unknown acute dermal toxicity. 10.7 percent of this mixture consists of ingredient(s) of unknown acute inhalation toxicity.

SECTION 3: Composition / Information on Ingredients

3.1. Components of Mixture

Chemical Name (IUPAC)	Common Name and Synonyms	CAS Number	Weight%
water	Water	7732-18-5	88.16
aluminum azanium disulfate dodecahydrate	Aluminum Ammonium Sulfate Dodecahydrate; Sulfuric acid, aluminum ammonium salt (2:1:1), dodecahydrate	7784-26-1	10.66
ammonium hydroxide	Ammonium Hydroxide; Aqueous ammonia	1336-21-6	1.18



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SECTION 4: First-Aid Measures

4.1. Description of Necessary First-Aid Measures

Eye Contact: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. May cause irritation, redness, pain, and tearing.

Ingestion: Dilute with water or milk. Vomiting may occur spontaneously but do not induce. Call a physician immediately.

Inhalation: Not expected to require first aid. If necessary, remove to fresh air.

Skin Contact: IF ON SKIN: Wash with plenty of water. May cause irritation, redness, and pain.

4.2. Most Important Symptoms and Effects, Acute and Delayed

Causes skin irritation May cause irritation to eyes, skin and respiratory system Wash areas of contact with plenty of water. If ingested, dilute with water and call a physician if necessary. Minimal hazards are associated with this solution. EYE CONTACT: May cause irritation, redness, pain, and tearing. SKIN CONTACT: May cause irritation, redness, and pain.

4.3. Immediate Medical Attention or Special Treatment Needed

Irrigate immediately with large quantity of water for at least 15 minutes. Call a physician if irritation develops. Remove to fresh air. Give artificial respiration if necessary. If breathing is difficult, give oxygen. Flush with plenty of water for at least 15 minutes. Call a physician if irritation develops. Dilute with water or milk. Vomiting may occur spontaneously but do not induce. Call a physician immediately.

SECTION 5: Fire-Fighting Measures

5.1. Extinguishing Media

Use any means suitable for extinguishing surrounding fire.

5.2. Specific Hazards Arising from the Substance or Mixture in a Fire

Not considered to be a fire or explosion hazard.

5.3. Special Protective Equipment and Precautions for Firefighters

Use protective clothing and NIOSH-approved breathing equipment appropriate for the surrounding fire.

SECTION 6: Accidental Release Measures

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

Wear protective gloves and eye protection.

6.2. Cleanup and Containment Methods and Materials

Ventilate area of leak or spill. Cover spill with a 1:1:1 mixture by weight of Sodium Carbonate or Calcium Carbonate, clay and sand. Scoop mixture into a plastic container and, in the fume hood, add to a pail of cold water. Neutralize this mixture with 5% Hydrochloric Acid, let stand overnight, then pour the liquid into the drain while flushing with water. Dispose of any solid with normal refuse. Wash the area of the spill with plenty of water.

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SECTION 7: Handling and Storage

7.1. Precautions for Safe Handling and Storage Conditions

As with all chemicals, wash hands thoroughly after handling. Avoid contact with eyes and skin. Protect from freezing and physical damage. Empty containers may be hazardous since they retain product residues. The Aluminum Hydroxide Suspension will settle to the bottom of the bottle during storage. Vigorously invert the bottle several times to mix well before use.

SECTION 8: Exposure Controls / Personal Protection

8.1. Exposure Limits

U.S. OSHA - Permissible Exposure Limits (PEL) - Time Weighted Averages (TWA)

Chemical Name	CAS Number	Exposure Limit
Ammonium Hydroxide	1336-21-6	"50 ppm TWA; 35 mg/m3 TWA" As Ammonia [7664-41-7]

U.S. OSHA - Permissible Exposure Limits (PEL) - Ceiling Limits

No limits found.

U.S. OSHA - Permissible Exposure Limits (PEL) - Short Term Exposure Limits (STEL)

No limits found.

U.S. OSHA - Specifically Regulated Chemicals

No limits found.

ACGIH - Threshold Limit Values - Ceilings (TLV-C)

No limits found.

ACGIH - Threshold Limit Values - Short Term Exposure Limits (TLV-STEL)

Chemical Name	CAS Number	Exposure Limit
Ammonium Hydroxide	1336-21-6	"35 ppm STEL" As Ammonia [7664-41-7]

ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)

Chemical Name	CAS Number	Exposure Limit
Ammonium Hydroxide	1336-21-6	"25 ppm TWA" As Ammonia [7664-41-7]

8.2. Engineering Controls

A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limit.

8.3. Individual Protective Measures and Personal Protective Equipment



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Respiratory Protection: If the TLV is exceeded, a full-face chemical cartridge respirator may be worn up to 50 times the TLV or the maximum use concentration specified by the respirator supplier, whichever is less.

Skin Protection: Chemical resistant gloves.

Eye Protection: Safety glasses or goggles.

SECTION 9: Physical and Chemical Properties

9.1. Physical and Chemical Properties

Physical State: liquid

Color: Milky white suspension

Odor: Data not available.

Odor Threshold: Data not available.

Melting/Freezing Point: Approximately 0°C

Boiling Point/Range: Approximately 100°C

Flammability: Data not available.

Flammability/Explosive Limits: Data not available.

Flash Point: Not flammable

Auto-Ignition Temperature: Data not available.

Decomposition Temperature: Data not available.

pH: alkaline

Kinematic Viscosity: Data not available.

Solubility: miscible

Vapor Pressure: Data not available.

Evaporation Rate: Data not available.

Relative Density: 1.1

Relative Vapor Density: Data not available.

Particle Characteristics: Data not available.

Partition Coefficient n-octanol/water, log Data not available.

SECTION 10: Stability and Reactivity

10.1. Reactivity and Chemical Stability

Stable under normal conditions of use and storage.

10.2. Possibility of Hazardous Reactions

Data not available.

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10.3. Conditions to Avoid and Incompatible Materials

Strong oxidizers, acids.

10.4. Hazardous Decomposition Products

Will not occur.

SECTION 11: Toxicological Information

11.1. Information on Toxicological Effects

Acute Toxicity - Oral Exposure:

No information found.

Acute Toxicity - Dermal Exposure:

No information found.

Chemical Name	CAS Number	Toxicity
Aluminum Ammonium Sulfate Dodecahydrate	7784-26-1	Dermal LD50 Rat >2000 mg/kg (Source: ECHA_API) As Sulfuric acid, aluminum ammonium salt (2:1:1) [7784-25-0]

Acute Toxicity - Inhalation Exposure:

Inhalation acute toxicity estimate (ATE, vapor): 227.1356 mg/L, 4 h(calculated)

Chemical Name	CAS Number	Toxicity
Ammonium Hydroxide	1336-21-6	Inhalation LC50 Acute Toxicity Estimate 3 mg/L 4 h (Source: ECHA)

11.2 Carcinogenicity:

International Agency for Research on Cancer (IARC)

Chemical Name	CAS Number	Classification
No data found.		

National Toxicology Program (NTP)

Chemical Name	CAS Number	Classification
No data found.		

U.S. OSHA specifically regulated carcinogens

Chemical Name	CAS Number	Classification
No data found.		

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11.3 Additional Toxicology Information:

Causes skin irritation. Causes serious eye irritation.

SECTION 12: Ecological Information

12.1. Ecotoxicity

Chemical Name	CAS Number	Species	Exposure	Toxicity
Ammonium Hydroxide	1336-21-6	Freshwater Fish	Acute	LC50 96 h Pimephales promelas 8.2 mg/L
Ammonium Hydroxide	1336-21-6	Water Flea	Acute	EC50 48 h water flea 0.66 mg/L; EC50 48 h Daphnia pulex 0.66 mg/L
Aluminum Ammonium Sulfate Dodecahydrate	7784-26-1	Water Flea	Chronic	"NOEC 21 d Daphnia magna 0.076 mg/L [semi-static] (reproduction, ECHA_API); NOEC 21 d Daphnia magna 0.137 mg/L [semi-static] (immobilisation, ECHA_API)" As Sulfuric acid, aluminum ammonium salt (2:1:1) [7784-25-0]

12.2. Persistence and Degradability

Data not available.

12.3. Bioaccumulative Potential

Data not available.

12.4. Mobility in soil

Data not available.

12.5. Other Adverse Ecological Effects

Data not available.

SECTION 13: Disposal Considerations

13.1. Waste Treatment Methods

Data not available.



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SECTION 14: Transportation Information

14.1 Transportation by Land - Department of Transportation (DOT, United States of America)

Not regulated according to DOT regulations.

14.2 Transportation by Air - International Air Transport Association (IATA)

Not regulated according to IATA Dangerous Goods Regulations.

14.3 Transportation of Dangerous Goods (TDG, Canada)

Not regulated according to TDG regulations.

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SECTION 15: Regulatory Information

15.01. Occupational Safety and Health Administration (OSHA) Hazards

Chemical Name	CAS Number	Regulatory Information
		No data found.

15.02. Superfund Amendments and Reauthorization Act (SARA) 302 Extremely Hazardous Substances

Chemical Name	CAS Number	RQ	TPQ
Ammonium Hydroxide	1336-21-6	"500 lb TPQ" As Ammonia [7664-41-7]	"100 lb EPCRA RQ" As Ammonia [7664-41-7]

15.03. Superfund Amendments and Reauthorization Act (SARA) 311/312 Hazardous Chemicals

Chemical Name	CAS Number	Regulatory Information
Ammonium Hydroxide	1336-21-6	1000 lb final RQ; 454 kg final RQ

15.04. Superfund Amendments and Reauthorization Act (SARA) 313 Toxics Release Inventory (TRI)

Chemical Name	CAS Number	List	Regulatory Information
Ammonium Hydroxide	1336-21-6	Emission Reporting	"1.0 % de minimis concentration (includes anhydrous Ammonia and aqueous Ammonia from water dissociable Ammonium salts and other sources, 10% of total aqueous Ammonia is reportable under this listing)" As Ammonia [7664-41-7]; "1.0 % de minimis concentration (10% of total aqueous Ammonia is reportable under this listing)" As Aqueous ammonia from water dissociable ammonium salts and other sources [RR-47925-4]

15.05. Massachusetts Right-to-Know Substance List

Chemical Name	CAS Number	Regulatory Information
Ammonium Hydroxide	1336-21-6	Present

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15.06. Pennsylvania Right-to-Know Hazardous Substances

Chemical Name	CAS Number	Regulatory Information
Ammonium Hydroxide	1336-21-6	Environmental hazard
Aluminum Ammonium Sulfate Dodecahydrate	7784-26-1	"Present" As Aluminum soluble salts [RR-00021-5]

15.07. New Jersey Worker and Community Right-to-Know Components

Chemical Name	CAS Number	Regulatory Information
Ammonium Hydroxide	1336-21-6	sn 0103

15.08. California Proposition 65

Chemical Name	CAS Number	Regulatory Information
No data found.		

15.09. Canada Domestic Substances List / Non-Domestic Substances List (DSL/NDSL)

Chemical Name	CAS Number	List	Status
Ammonium Hydroxide	1336-21-6	DSL	Present
Water	7732-18-5	DSL	Present
Aluminum Ammonium Sulfate Dodecahydrate	7784-26-1	DSL	Present

15.10. United States of America Toxic Substances Control Act (TSCA) List

Chemical Name	CAS Number	Status
Ammonium Hydroxide	1336-21-6	Present (ACTIVE)
Water	7732-18-5	Present [XU] (ACTIVE)
Aluminum Ammonium Sulfate Dodecahydrate	7784-26-1	"Present (ACTIVE)" As Sulfuric acid, aluminum ammonium salt (2:1:1) [7784-25-0]

15.11. European Inventory of Existing Commercial Chemical Substances (EINECS), European List of Notified Chemical Substances (ELINCS), and No Longer Polymers (NLP)

Chemical Name	CAS Number	List	Number
Ammonium Hydroxide	1336-21-6	EINECS	215-647-6
Water	7732-18-5	EINECS	231-791-2
Aluminum Ammonium Sulfate Dodecahydrate	7784-26-1	EINECS	"232-055-3" As Aluminium ammonium bis(sulphate) [7784-25-0]

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15.12. China - Inventory of Existing chemical Substances (IECSC)

Chemical Name	CAS Number	Status
Ammonium Hydroxide	1336-21-6	Present [27662]
Water	7732-18-5	Present [32224]
Aluminum Ammonium Sulfate Dodecahydrate	7784-26-1	Present [23160] (listed under Sulfuric acid, aluminium(3+) ammonium salt (2:1:1))

15.13. Korea - Existing Chemicals Inventory (KECI/KECL)

Chemical Name	CAS Number	List	Status
Ammonium Hydroxide	1336-21-6	Annex 1	Present [KE-01688]
Water	7732-18-5	Annex 1	Present [KE-35400]
Aluminum Ammonium Sulfate Dodecahydrate	7784-26-1	Annex 1	"Present [KE-00885]" As Ammonium alum [7784-25-0]

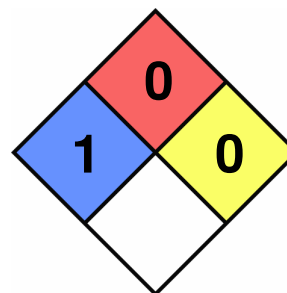
15.14. Japan - Existing and New Chemical Substances Inventory (ENCS)

Chemical Name	CAS Number	MITI No.
Ammonium Hydroxide	1336-21-6	(1)-314
Water	7732-18-5	- (listed on Japanese Pharmacopoeia 8th Edition)
Aluminum Ammonium Sulfate Dodecahydrate	7784-26-1	(1)-25, (1)-400 (not considered as a new chemical substance)

SECTION 16: Other Information

16.1 National Fire Protection Associate (NFPA) Rating

Health: 1
Flammability: 0
Reactivity: 0
Special Hazard:





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16.2 Document Revision

Last Revision Date:

2026-05-06

DISCLAIMER

When handled properly by qualified personnel, the product described herein does not present a significant health or safety hazard. Alteration of its characteristics by concentration, evaporation, addition of other substances, or other means may present hazards not specifically addressed herein and which must be evaluated by the user. The information furnished herein is believed to be accurate and represents the best data currently available to us. No warranty, expressed or implied, is made and RICCA CHEMICAL COMPANY assumes no legal responsibility or liability whatsoever resulting from its use.