SAFETY DATA SHEET
AMMONIA WATER, 10% AQUEOUS

Section 1 - Chemical Product and Company Identification

SDS Name: Ammonia Water, 10% Aqueous
Avantik Item Number: RS4676-1GL
Company Identification: Avantik
19 Chapin Road – Building C
Pine Brook, NJ 07058
For information, call: 800-783-9424
Emergency Number: 800-424-9300
For CHEMTREC assistance, call: 800-424-9300

Section 2 - Hazards Identification

GHS Classifications

H290-Corrosive to metals: 1
H302-Acute toxicity, oral: 4
H315-Skin Corrosion/irritation: 2
H318-Serious eye damage/eye irritation: 1
H333-Acute toxicity, inhalation: 5
H401-Hazardous to the aquatic environment, acute toxicity: 2
H412-Hazardous to the aquatic environment, chronic toxicity: 3

Pictograms or Hazard symbols and Hazard statement(s):

Signal Word: Danger

Hazard Statements:

H290-May be corrosive to metals
H302-Harmful if swallowed
H315-Causes skin irritation
H318-Causes serious eye damage

H333-May be harmful if inhaled
H401-Toxic to aquatic life
H412-Harmful to aquatic life with long lasting effects

Precautionary Statements:

P234-Keep only in original container.
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/eye protection/face protection.
P301+P312-If swallowed: Call a Poison Center or doctor/physician if you feel unwell.
P302+P352-If on skin: Wash with plenty of soap and water.
P304+P312-If inhaled: Call a Poison Center or doctor/physician if you feel unwell.
P305+P351+P338-If in eyes: Rinse cautiously 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.
P330-Rinse mouth.
P332+P313-If skin irritation occurs: Get medical advice/attention.
P362-Take off contaminated clothing and wash before reuse.
P390-Absorb spillage to prevent material damage.
P406-Store in corrosive resistant container with a resistant inner liner.
P501-Dispose of contents/container in accordance with local/regional/national/international regulations.

Section 3 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent
1336-21-6	Ammonium Hydroxide 28-30%	10 v/v
7732-18-5	Water	balance

Section 4 - First Aid Measures

Eye Exposure: IMMEDIATE ACTION IS ESSENTIAL FOR EYE EXPOSURES. In case of contact with eyes, immediately flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

Dermal Exposure: In case of skin contact, immediately flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. Wash clothing before reuse. Seek medical attention.

Oral Exposure: If swallowed, seek immediate medical advice. Give large quantities of water. Do not induce vomiting.

Inhalation Exposure: If inhaled, remove to fresh air. If breathing becomes difficult, give oxygen and immediately call a physician.

Note: Ammonium hydroxide (concentrated) causes burns by all exposure routes. Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation. Ammonium hydroxide is a corrosive material.

Section 5 - Fire Fighting Measures

Firefighters should wear proper protective clothing and self contained breathing apparatus with full piece operated in positive pressure mode to prevent contact with skin and eyes.
Extinguishing Media: Use water spray, dry chemical powder, carbon dioxide or alcohol-resistant foam.
Flash Point: N/A

NFPA Rating: (estimated) Health: 2; Flammability: 0; Instability: 0

Section 6 - Accidental Release Measures

Procedure(s) of Personal Precaution(s):
Wear protective gear.

Methods for Cleaning up: Ventilate area of leak or spill. Wear appropriate personal protective equipment. Keep people away from and upwind of spill/leak. Evacuate personnel to safe areas. Avoid contact with skin, eyes, and inhalation of vapors. Absorb with sand, earth or vermiculite. Carefully sweep up and containerize for proper disposal. Do not release into the environment. Keep out of waterways. Do not release into drains.

Section 7 - Handling and Storage

Use only under a chemical fume hood. Wear personal protective equipment. Do not get in eyes, on skin, or clothing. Do not ingest. Do not breathe vapors or mist. Use care when handling. Wash thoroughly after handling. Store capped at in a dry, cool and well-ventilated place. Corrosive material. Keep away from incompatible materials.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls: Use explosion-proof ventilation equipment. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use

adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Personal Protective Equipment
Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.
Skin: Wear appropriate protective gloves to prevent skin exposure.
Clothing: Wear appropriate protective clothing to prevent skin exposure.
Respirators: A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant a respirator's use.

Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Ammonia	TWA 25 ppm STEL 35 ppm	IDLH 300 ppm TWA 25 ppm TWA 18 mg/m3 STEL 35 ppm STEL 27 mg/m3	TWA 50 ppm TWA 35 mg/m3

OSHA Vacated PEL: STEL 35 ppm; STEL 27 mg/m3

Section 9 - Physical and Chemical Properties

Physical State: Liquid
Appearance: Colorless
Odor: Ammonia
Vapor Pressure: not available
Odor threshold: not available
Vapor Density: not available
pH: approx. 11-12
Relative density: not available
Melting point/freezing point: not available
Solubility: soluble in water
Boiling Point: not available
Flash point: not available
Evaporation Rate: not available

Flammability (solid, gas): not applicable
Flammability or explosive limits:
Upper: not available
Lower: not available
Partition coefficient: n-octanol/water: not available
Auto-ignition temperature: not available
Decomposition temperature: not available
Viscosity: not available

Section 10 - Stability and Reactivity

Chemical Stability: Stable under ordinary conditions of use and storage. Heat and sunlight can contribute to instability.
Conditions to Avoid: Heat, sunlight, sources of ignition, incompatibles.
Incompatibilities with Other Materials: Acids, Acrolein, Dimethyl sulfate, halogens, Silver nitrate, Propylene Oxide, Nitromethane, Silver oxide, Silver permanganate, Oleum, Beta-propiolactone, metals, acids, fluorine, strong oxidizing agents.
Hazardous Decomposition Products: Nitrogen oxides, ammonia, irritating and toxic fumes.
Hazardous Polymerization: Will not occur.

Section 11 - Toxicological Information

Ammonia CAS#7664-41-7:
LD50, oral: 350 mg/kg (rat)
LC50, inhalation: 2000 ppm (rat) 4h

Ammonium Hydroxide CAS#1336-21-6:
Carcinogenicity:
CAS#1336-21-6 : Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Mutagenic Effects: no information available.
Reproductive Effects: no information available.
Developmental Effects: no information available.
Teratogenicity: no information available.
Specific target organ toxicity-single exposure: no information available
Specific target organ toxicity-repeated exposure: no information available

Note: Ingestion of concentrated ammonium hydroxide causes severe swelling, severe damage to the delicate tissue and danger of perforation. Corrosive material.

The toxicological properties of this material have not been fully investigated.

Section 12 - Ecological Information

Ecotoxicity: Toxic to aquatic organisms. Do not release to the environment. Do not release into drains.

Ammonium Hydroxide CAS#1336-21-6:

LC50, freshwater fish: 0.53 mg/l 96h; 8.2 mg/L (fathead minnow) 96h

EC50, water flea: 0.66 mg/l 48h

Persistence and Degradability: no information available

Bioaccumulation: no information available

Mobility: Due to its water solubility, the material is expected to move readily in soil and water.

Section 13 - Disposal Considerations

DISPOSAL: Dispose of in accordance with all federal, state, and local regulations.

Section 14 – Transport Information

DOT
Non-regulated

Section 15 - Regulatory Information

Canada Regulatory Information
WHMIS Classification: This product has been classified in accordance with the hazard criteria of the CPR, and the SDS contains all the information required by the CPR.

Section 16 - Additional Information

SDS Creation Date: 4/28/21

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users

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