



Material Safety Data Sheet

N/A=Not Applicable

(Prepared According To 29 CFR 1910, 1200)

Effective Date: 02/02/03

Product Identification

Product Name: Ammonia
 Generic Name: Ammonia
 Supplier's Name: HydraMaster
 Supplier's Address: 11015 47th Avenue West, Mukilteo, WA 98275

Chemical Family: Spotter
 Formula: Mixture
 Phone Number: (425) 775-7272
 Emergency: (425) 775-7272

NPCHA Hazardous Materials Identification System

Health	1
Flammability	0
Reactivity	0
Maximum Personal Protection	B

Ingredients

CHEMICAL NAME	CAS NO.	WT. %	PEL	TWA-TLV	STEL-TLV	CARCINOGEN
2-Butoxyethanol	111-76-2	10	25	25	NA	No
Isopropyl Alcohol	67-63-0	5	400	400	500	No
Ammonium Hydroxide	1336-21-6	1	50	25	NA	No

Physical Data

Boiling Range: 212° F
 Vapor Pressure: N/A
 %Volatile: 95%
 Solubility in Water: Complete
 Physical Description: Liquid, non-viscous, faint sweet odor

Specific Gravity: 0.98
 Vapor Density: Heavier than air
 pH: 11.0 - 12.0
 Evaporation Rate: Slower than ether

Reactivity Data

Stability: Stable
 Hazardous Polymerization: Will not occur
 Incompatibility (Materials to Avoid): Acids, strong oxidizers, many organic chemicals, and organic acids.
 Hazardous Decomposition Products: May liberate carbon monoxide and carbon dioxide. Unidentified organic compounds may be formed during combustion.

Fire and Explosion Hazard Data

Concentrate Flash Point (Method): None
 Propellant Flash Point (Method): N/A
 Flash Point (Method): COC
 Extinguishing Media: Foam, CO2, Dry Chemical, Water Fog
 Special Fire Fighting Procedures: Fire fighters should wear self-contained breathing apparatus and full protective clothing. Use water spray to cool nearby containers and structures exposed to fire.
 Unusual Fire and Explosion Hazards: None

Explosive Limits
 Upper: 25
 Lower: 1.1

Storage and Handling Information

Precautions to be Taken in Handling and Storage: Store in a dry, well ventilated place away from incompatible materials. Keep container tightly closed when not in use. Store at temperatures above the solutions freezing point to remain liquid. Do not use pressure to empty container.
 Other Precautions: Empty containers usually still hold residues of material and vapors. These must be considered hazardous and disposed of in accordance with proper handling procedures prescribed for hazardous chemicals. When mixing with water, always add this product to water and stir.

Health Hazards and First Aid

Effect of Overexposure:
 Primary Route of Entry:
 Skin: Vapor, liquid, and mists are irritating to skin.
 Eyes: Vapors, liquid, and mists are irritating. Liquid and mists may damage the eyes.
 Inhalation: Vapors and mists can be harmful to the nose, throat, and mucous membranes. Irritation, coughing, chest pain, and breathing difficulty may occur with overexposure. Inhalation of very high concentrations may cause headaches, nausea, vomiting.
 Ingestion: Vapors, mists, and liquid are irritating to the mouth and throat. Swallowing the liquid burns the tissues, and may cause severe abdominal pain, nausea, and vomiting. May cause red blood cell hemolysis, liver and kidney injury.

First Aid Procedures
 Skin: Immediately flush skin with lots of running water for at least 15 minutes. Remove contaminated clothing and shoes.
 Eyes: Flush immediately with large amounts of running water. for at least 15 minutes holding eye lids open. Get medical attention.
 Inhalation: Remove to fresh air. Give artificial respiration if not breathing.
 Ingestion: Drink 1-8 glasses of water or milk to dilute. Do not induce vomiting. Consult a physician or poison control center immediately. Treat symptomatically. Do not give anything by mouth to an unconscious or convulsing person.

Special Protection Information

Respiratory Protection: In the absence of adequate ventilation an approved respirator may be required.
 Protective Gloves: Wear resistant gloves such as polyethylene or rubber.
 Other Protective Equipment: Where gross eye and skin contact may occur use and wear appropriate clothing, rubber boots with pants on the outside, and rubber gloves.

Ventilation: Be sure to provide adequate ventilation in all working areas at all times. In general, health problems could result from repeated and prolonged exposure to chemical vapors.

Eye Protection: Chemical splash goggles should be worn during application of this product.

Spill or Leak Procedures

Steps to be Taken in Case Material is Released or Spilled:
 For small spills dilute with water, mop or wipe up and contain. For large spills, contain by diking with absorbent material and carefully neutralize with a mild acid. Keep material out of sewers, storm drains, surface waters, and soil.

Waste Disposal Method:
 Comply with all applicable governmental regulations on spill reporting, handling and disposal of waste. Dispose of contaminated product and materials used in clean up in a manner approved for this material and the contaminant. Consult appropriate Federal, State and Local regulatory agencies to ascertain proper disposal procedures and comply with them.