

# MATERIAL SAFETY DATA SHEET

For R&D use only. Not for drug, household or other uses.

Click <http://www.lookchem.com/cas-133/1336-21-6.html> for suppliers of this product.

## Composition/Information on Ingredient

**Cas:**  
1336-21-6  
**Code:**  
M

**RTECS:**  
BQ9625000  
**Code:**  
M

**Name:**  
AMMONIUM HYDROXIDE (SARA III)

**Other REC Limits:**  
N/P

**OSHA PEL:**  
NOT ESTABLISHED  
**Code:**  
M

**OSHA STEL:**

**Code:**

**ACGIH TLV:**  
NOT ESTABLISHED  
**Code:**  
M

**ACGIHSTEL:**  
N/P  
**Code:**

## Control Measures

**Respiratory Protection:**  
GENERAL PURPOSE GAS MASK

**Ventilation:**  
VENTILATION AS NEEDED.KEEP AMMONIA CONCENTRATION LESS 50 PPM

**Protective Gloves:**  
RUBBER

**Eye Protection:**  
GOGGLES

**Other Protective Equipment:**  
Equipment LARGE FACE SHIELD

**Work Hygienic Practices:**  
N/P

**Supplemental Safety and Health:**  
THE PRODUCT IS MANUFACTURED BY FEDERAL SPECIFICATION O-A-451 TYPE I

## Health Hazards Data

**LD50LC50Mixture:**  
N/P

**Route Of Entry Inds - Inhalation:**  
N/P

**Skin:**  
N/P

**Ingestion:**  
N/P

**Carcinogenicity Inds - NTP:**  
N/P

**IARC:**  
N/P

**OSHA:**  
N/P

**Health Hazards Acute And Chronic:**  
N/P

**Explanation Of Carcinogenicity:**  
N/P

**Signs And Symptions Of Overexposure:**  
IRRITATION OF EYES AND THROAT.HEADACHE,SALIVATION,NAUSEA,VOMITING,PULMONARY EDEMA,DIFFICULT BREATH. 2

**Medical Cond Aggravated By Exposure:**  
N/P

**First Aid:**  
FLUSH CONTACTED AREA WITH WATER FOR AT LEAST 15 MINUTES.CONSULT PHYSICIAN.IRRIGATE EYES WITH WATER,THEN INSTILL OLIVE OIL.WASH CNTAMINATED AREAS OF BODY WITH SOAP AND WATER.SUPPLY OXYGEN WITH USE OF I INTERMITTENT POSITIVE PRESSURE BREATHINGAPPARATUS

**Spill Release Procedures:**  
NEUTRALIZE WITH HCL. WIPE WITH MOP OR USE WATER ASPIRATOR.AVOID PHYSICAL CONTACT AND INHALATION OF VAPORS.DILUTE WITH LARGE QUANTITIES OF WATER.DRAIN INTO APPROVED DISPOSAL AREA.

**Neutralizing Agent:**  
N/P

**Waste Disposal Methods:**  
PUT INTO LARGE APPROVED STORAGE VESSEL FOR CORROSIVES,CONTAINING WATER.NEUTRALIZE WITH HCL.DISCHARGE INTO APPROVED DISPOSAL AREA

**Handling And Storage Precautions:**  
BOTTLES WITH GLASS,PLASTIC OR RUBBER PLUG MUST NOT BE FILLED COMPLETELY TO THE BRIM AND MUST BE STORED IN COOL PLACE.

**Other Precautions:**  
KEEP AWAY FROM STRONG ACIDS

## Fire and Explosion Hazard Information

**Flash Point Method:**  
N/P

**Flash Point:**

**Flash Point Text:**  
NONE

**Autoignition Temp:**

**Autoignition Temp Text:**  
N/A

**Lower Limits:**  
16.0

**Upper Limits:**  
25.0

**Extinguishing Media:**  
3 NONE.NON COMBUSTIBLE

**Fire Fighting Procedures:**  
NONE

**Unusual Fire/Explosion Hazard:**  
AMMONIA VAPORS RELEASED FROM SOLUTION CAN FORM AN EXPLOSIVE MIXTURE WITH AIR

## Physical/Chemical Properties

**HCC:**  
B1

**NRC/State LIC No:**

**Net Prop WT For Ammo:**  
4

**Boiling Point:**

**B.P. Text:**  
212 F

**Melt/Freeze Pt:**

**M.P/F.P Text:**  
N/A

**Decomp Temp:**

**Decomp Text:**  
N/A

**Vapor Pres:**  
584

**Vapor Density:**  
0

**Volatile Org Content %:**

**Spec Gravity:**  
0.8974

**VOC Pounds/Gallon:**

**PH:** N/P

**VOC Grams/Liter:**

**Viscosity:**  
N/P

**Evaporation Rate & Reference:**  
LT 1.0 REF:ETHER

**Solubility in Water:**  
COMPLETE

**Appearance and Odor:**  
COLORLESS LIQUID,PUNGENT ODOR.

**Percent Volatiles by Volume:**  
100

**Corrosion Rate:**  
N/P

## Reactivity Data

**Stability Indicator:**  
YES

**Stability Condition To Avoid:**  
N/P

**Materials To Avoid:**  
STRONG ACID

**Hazardous Decomposition Products:**  
NONE

**Hazardous Polymerization Indicator:**  
NO

**Conditions To Avoid Polymerization:**  
N/P

## Toxicological Information

**Information:**N/P

## MSDS Transport Information

**Information:**N/P

## Regulatory Information

**Sara Title III Information:** N/P

**Federal Regulatory Information:** N/P

**State Regulatory Information:** N/P

## Other Information

**Other Information:**N/P