

NATIONAL AMMONIA CO -- AQUA AMMONIA -- 6810-01-018-6726

===== Product Identification =====

Product ID:AQUA AMMONIA

MSDS Date:01/01/1987

FSC:6810

NIIN:01-018-6726

MSDS Number: BNPTS

=== Responsible Party ===

Company Name:NATIONAL AMMONIA CO

Address:TACONY & VANKIRK STS

City:PHILADELPHIA

State:PA

ZIP:19135

Country:US

Info Phone Num:215-535-7530

Emergency Phone Num:215-535-7530;800-424-9300(CHEMTREC)

CAGE:21059

=== Contractor Identification ===

Company Name:NATIONAL AMMONIA CO

Address:TACONY AND VAN KIRK STREETS

Box:City:PHILDELPHIA

State:PA

ZIP:19135

Country:US

Phone:215-525-7530

CAGE:21059

===== Composition/Information on Ingredients =====

Ingred Name:AMMONIUM HYDROXIDE; (AMMONIUM HYDROXIDE SOLUTION) (SARA  
III). COMPOSITION: 29.4% BY WT OF AMMONIA GAS DISSOLVED IN H<sup>2</sup>O.

CAS:1336-21-6

RTECS #:BQ9625000

Fraction by Wt: SEE ING

OSHA PEL:50(NH<sup>3</sup>)PPM

ACGIH TLV:25(NH<sup>3</sup>)P

PM;35 STEL  
EPA Rpt Qty:1000 LBS  
DOT Rpt Qty:1000 LBS

Ingred Name:FIRST AID PROC: IF SYMPTOMS PERSIST OR EXPOSURE IS SEVERE,  
SEEK PROMPT MED HELP! NOTE TO MD: EYE INJURY MAY (ING 3)  
RTECS #:9999999ZZ

Ingred Name:ING 2: APPEAR AS DELAYED PHENOMENON. PULM EDEMA MAY FOLLOW  
CHEMICAL BRONCHITIS. SUPPORTIVE TREATMENT W/NECESSARY (ING 4)  
RTECS #:9999999ZZ

Ingred Name:ING 3: VENTILATORY ACTIONS, INCLUDING OXYGEN, MAY WARRANT  
CONSIDERATION.  
RTECS #:9999999ZZ

Ingred Name:WASTE DISP METH: UN  
DER THE COMPREHENSIVE ENVIRON RESPONSE,  
COMPENSATION, & LIABILITY ACT OF 1980, ANY ENVIRON (ING 6)  
RTECS #:9999999ZZ

Ingred Name:ING 5: RELEASE OF THIS CHEM EQUAL TO OR OVER THE REPORTABLE  
QTY OF 1000 LBS MUST BE REPORTED PROMPTLY TO NRC.  
RTECS #:9999999ZZ

Ingred Name:VAPOR PRESSURE: 420-475 @ 15.5C.  
RTECS #:9999999ZZ

===== Hazards Identification =====

LD50 LC50 Mixture:NONE SPECIFIED BY MANUFACTURER.

Routes of Entry: Inhalation:YES Skin:NO Ingestion:YES

Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO

Health Hazards Acute and Chronic:IRRITANT AND CORROSIVE TO SKIN, EYE,  
RESPIRATORY TRACT AND MUCOUS MEMBRANES. MAY CAUSE SEVERE BURNS, EYE  
AND LUNG INJURIES.

Explanation of Carcinogenicity:NOT RELEVANT

Effects of Overexposure:SKIN: LOCAL IRRIT/BURNS; BLISTER FORMATION.

EYES: BURNS, MAY LEAD TO BLINDNESS. INGEST: BURNING PAIN IN MOUTH,  
THROAT, STOM, THORAX, CONSTRICTION OF THROAT, COUGHING, FOLLOWED BY  
VOMIT/DIARR. PRO

BABLE LETHAL INGEST DOSE IS 3-4 ML (1 OUNCE).

INHAL: IRRIT, HDACH COUGHING, SEV LUNG CONGESTION, BRTHG DFCLTY,  
CONVL, SHOCK.

Medical Cond Aggravated by Exposure:SKIN AND RESPIRATORY RELATED  
DISEASES AGGRAVATED BY EXPOSURE.

===== First Aid Measures =====

First Aid:SKIN: FLUSH W/COPIOUS AMOUNT OF WATER WHILE REMOVING CONTAMD  
CLTHG/SHOES. DO NOT RUB OR APPLY OINTMENT ON AFFECTED AREA. INGEST:  
IF CONSCIOUS, GIVE LARGE AMOUNT OF WATER TO DR  
INK. REFER IMMED TO  
MD. E YES: FLUSH W/COPIOUS AMT OF WATER FOR AMINIMUM OF 15 MIN.  
EYELIDS SHLD BE HELD APART & AWAY FROM EYEBALL FOR THOROUGH  
RINSING. INHAL: REMOVE TO FRESH AIR. ADMINISTER O\*2/ARTF RESP IF  
NEC. (ING 2)

===== Fire Fighting Measures =====

Flash Point:NONE

Lower Limits:16%

Upper Limits:25%

Extinguishing Media:NON-COMBUSTIBLE. USE MEDIA SUITABLE FOR SURROUNDING  
FIRE .

Fire Fighting Procedures:WEAR NIOSH/MSHA APPRVD SCBA & FU  
LL PROT EQUIP

. NOT CONSIDERED A PRIMARY FIRE HAZ, BUT CARE SHLD BE TAKEN TO  
AVOID EXPOSURE TO LIQUID PRODUCT (SUPP DATA)

Unusual Fire/Explosion Hazard:WHEN HEATED, MATL WILL GIVE OFF AMMONIA  
GAS, A STRONG IRRITANT TO EYE/RESP TRACT/MOIST SKIN. CLOSED CONTRS  
EXPOSED TO EXTREME HEAT MAY DEVELOP PRESS.(SUPP DATA)

===== Accidental Release Measures =====

Spill Release Procedures:WEAR NIOSH/MSHA APPRVD RESPIRATORY PROT &  
PROTECTIVE CLOTHING. STOP SOUR  
CE IF POSSIBLE. STAY UPWIND AND USE  
WATER SPRAY TO ABSORB THE EVOLVED GAS. DILUTE WITH LARGE AMOUNT OF  
WATER. CONTAIN SPILL BY D IKING. KEEP SPILL FROM ENTERING STREAMSOR  
LAKES.

Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

===== Handling and Storage =====

Handling and Storage Precautions:KEEP IN STRONG GLASS OR PLASTIC,  
TIGHTLY CLOSED CONTAINERS. STORE IN COOL (26.7C/80F) AND  
WELL-VENTILATED AREA.

Other Precautions:CORROSIVE MATERIAL

. AVOID UNNECESSARY EXPOSURE. USE  
PROTECTIVE EQUIPMENT AS NEEDED. DO NOT WEAR CONTACT LENSES WITHOUT  
GAS-TIGHT CHEMICAL GOGGLES.

===== Exposure Controls/Personal Protection =====

Respiratory Protection:NIOSH/MSHA APPRVD RESPIRATORY PROT W/FULL  
FACEPIECE FOR GAS & VAPOR CONTAMINANTS EFTIVE FOR AMMONIUM  
HYDROXIDE & ABLE TO BE USED FOR ENTRY & ESCAPE IN EMERGENCIES.  
REFER TO 29 CFR 1910.134 AND ANSI: Z 88.2-1980 FOR  
REQUIREMENTS/SELECTION.

Ventilation:LOC

AL EXHAUST SUFFICIENT TO KEEP AMMONIA GAS TO 50 PPM OR  
LESS. REFER TO 29CFR 1910.134 & ANSI:Z9.2-1960 REQ/SELECTION.

Protective Gloves:RUBBER GLOVES.

Eye Protection:CHEM WORK GOGG & FULL LGTH FSHLD

Other Protective Equipment:OVERSHOES & COTTON WORK CLOTHES. REFER TO 29  
CFR 1910.132-1910.136 FOR REQUIREMENTS. EYEWASH/SFTY SHOWER IN  
IMMED VICIN.

Work Hygienic Practices:NONE SPECIFIED BY MANUFACTURER.

Supplemental Safety and Health

BP: NH<sub>3</sub> VAPORS RELEASED ON WARMING. FIRE FIGHT PROC:  
INVOLVED IN FIRE.

COOL FIRE-EXPOSED CONTRS. EXPLO HAZ: COMBUST OF RELEASED AMMONIA  
MAY FORM NO<sub>2</sub>. CNDTNS (STAB): AQUA AMMONIA WILL REACT EXOTHERMI  
CALLY WITH ACIDS. RELEASES AMMONIA VAPOR WHEN HEATED. MATLS TO  
AVOID: HALOGENS, SODIUM HYDROXIDE. STRONG OXIDIZERS.

===== Physical/Chemical Properties =====

Boiling Pt:B.P. Text:SUPP DATA

Melt/Freeze Pt:M.P/F.P Text:-108F,-78C

Vapor Pres:SEE ING 7

Vapor Density: