

MAR 22 1994

KOBOY - RESLABS INC.

Ammonium Hydroxide
Photographic

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FOR 24 HOUR EMERGENCY TRANSPORTATION RESPONSE - CALL: 1 - 800 - 535 - 5053

REVISED ON: SEPTEMBER 23, 1993

I - PRODUCT IDENTIFICATION

Ammonia Solution, Division 8, UN2672, III
Corrosive, CAS # 1336 - 21 - 6

II - HAZARD DATA

NH₃ in H₂O, 17.7% to 29.4% NH₃
TLV 50 ppm (OSHA)
HMIS: 3 - 1 - 1 - B
Sara Title III, section 313 - RQ = 1000

III - PHYSICAL DATA

Clear colorless liquid. Pungent odor. Corrosive.
29.4% NH₃ at 15.5° C, density = .8974, 26° Be.
17.7% NH₃ at 15.5° C, density = .9333, 20° Be.
Melting point of 29.4% NH₃ approx. -72.4° C.
PSI (absolute) of 29.4% NH₃ at 26.7° C = 15.2
Vapor pressure = 590 mm at 40° C.
Solubility in water is complete
Density of NH₃ = .5963 @ 60° F

IV - FIRE & EXPLOSION HAZARD

NH₃ gas explosive at 16 - 25% by volume in air
Ignition temperature of NH₃ gas 651° C.

V - HEALTH HAZARD

TOXICITY DATA

orl rat - ld 50 = 350mg/kg
orl hmn - ldlo = 43mg/kg
ihl hmn - tcl = 700ppm tfx eye
ihl hmn - tcl = 408 ppm tfx irr
intraperitoneal mouse - ld 50 H₂O 190 g/kg
carcinogenicity - none identified

EXPOSURE DATA

tlv 50ppm (vapor per mm parts of air)
35 mg/m³ (mg per m³ of air)
hazard to unborn child - non identified

EFFECTS OF OVEREXPOSURE

INHALATION

Lung inflammation. Pulmonary edema.
Burns or severe irritation.

SKIN CONTACT

Severe irritation or burns.

EYE CONTACT

Prolonged exposure may cause blindness.
Irritation or severe burns.

INGESTION

Harmful and possibly fatal.

EMERGENCY FIRST AID

INHALATION

Remove to fresh air. If required,
provide artificial respiration.
Get emergency medical attention

SKIN CONTACT

Remove contaminated clothing.
Rinse skin. Consult a physician.

EYE CONTACT

Begin to flush with water at once.
Get immediate medical attention.
Flush with water while waiting.

INGESTION

Rinse mouth. Give plenty of water.
Transport to hospital immediately.

VI - REACTIVITY

Stable. Incompatible with strong acids, copper, silver, zinc,
mercury, bleach, chlorine and their alloys. Do not expose
to sources of heat. Burning ammonia emits toxic oxides of
nitrogen. Hazardous polymerization will not occur.

VII - SPILL OR LEAK

Contain spill. Keep area well ventilated. Small amounts can
be flushed with water. Large amounts should be pumped
into containers for disposal. Dispose at an approved
disposal site in accordance with federal and local law.

VIII - SPECIAL PROTECTION

OSHA requires wearing eye & face protection when
changing containers. If there is risk of exposure to high
concentration of ammonia gas, use full face shield scuba
equipment, do not wear contact lenses. Use neoprene
gloves and apron to protect against splash.

IX - SPECIAL PRECAUTIONS

Open cap slowly to relieve pressure. Keep container closed
when not in use. Do not store near sources of heat. Never
store in direct sunlight. Keep away from children. Do not
store near incompatible materials. Do not store indefinitely.
Do not dispose of container unless completely empty.

X - TRANSPORTATION DATA

Ammonia Solutions, 8, UN2672, III, Corrosive
Corrosive label required. CFR 49, 173.136.
Transport emergency response number required.
Cargo aircraft only - IATA, 60 L limit.
Do not store or transport with explosives or spontaneously
combustible materials.
Packages should be kept top side up and secured in place
during transport.
HM 181, 49 CFR Part 107, et al applies.