



SUPPLIER 920 N Trade Winds Pkwy  
ADDRESS: Columbia, MO 65201

EMERGENCY PHONE 800-535-5053  
NUMBER:

Date:  
10/20/2014

## 1. CHEMICAL PRODUCT

PRODUCT NAME: AMMONIA IN AIR  
SYNONYMS: None

## 2. COMPOSITION, INFORMATION ON INGREDIENT

Exposure Limits (PPM)						
Ingredient Name	Formula	CAS#	Concentration	ACGIH TLV	OSHA PEL	MAC
Ammonia	NH3	7664-41-7	25-100000PPM	25	50	25
Air	O2/N2	132259-10-0	BALANCE	NE	NE	NE

Note: NE = NONE ESTABLISHED

S/A = SIMPLE ASPHYXIANT

## 3. HAZARD IDENTIFICATION

### \*\*\*EMERGENCY OVERVIEW\*\*\*

High pressure oxidizing gas,  
Can cause irritation to the nose, throat, and respiratory tract.

### POTENTIAL HEALTH EFFECTS

ROUTES OF ENTRY: Inhalation

ACUTE EFFECTS: If inhaled, severe irritation of the nose, throat and upper respiratory tract will result. Symptoms include dyspnea, coughing, chest pains and pulmonary edema. Eye contact may result in destruction of eye tissue.

CHRONIC EFFECTS: Skin and respiratory related disease.

MEDICAL CONDITIONS AGGRAVATED BY OVEREXPOSURE: None known

OTHER EFFECTS OF OVEREXPOSURE: None

CARCINOGENICITY (US ONLY):

NTP – No  
OARC MONOGRAPHS – No  
OSHA REGULATED – No

## 4. FIRST AID MEASURES

INHALATION: Immediately remove victim to fresh air. If breathing has stopped, give artificial respiration. If breathing is difficult, give oxygen.

EYE CONTACT: Immediately flush with copious amounts of water for at least 15 minutes.

SKIN CONTACT: Immediately flush with copious amounts of water for at least 15 minutes while removing contaminated clothing.

INGESTION: None

IN EVENT OF EXPOSURE, CONSULT A PHYSICIAN

NOTE TO PHYSICIAN: None

## 5. FIRE FIGHTING MEASURES

FLASH POINT: Nonflammable

AUTOIGNITION TEMPERATURE: N/A

FLAMMABLE LIMITS: Nonflammable

LOWER:  
UPPER:

**EXTINGUISHING MEDIA:** Use what is appropriate for surrounding fire.

**SPECIAL FIRE FIGHTING INSTRUCTION AND EQUIPMENT:** Wear self-contained breathing apparatus and full protective clothing. Keep fire exposed cylinders cool with water spray. If possible, stop the product flow.

**HAZARDOUS COMBUSTION PRODUCTS:** Toxic fumes of nitrogen oxides.

**UNUSUAL FIRE AND EXPLOSION HAZARDS:** Cylinder rupture may occur under fire conditions. Emits toxic fumes under fire conditions.

## **6. ACCIDENTAL RELEASE MEASURES**

**CLEAN UP PROCEDURES:** Evacuate and ventilate area. Shut off source if possible and remove source of heat.

**SPECIALIZED EQUIPMENT:** None

## **7. HANDLING AND STORAGE**

**PRECAUTIONS TO BE TAKEN IN HANDLING:** Secure cylinder when using to protect from falling. Use suitable hand truck to move cylinders.

**PRECAUTIONS TO BE TAKEN IN STORAGE:** Store in well ventilated areas. Keep valve protection cap on cylinders when not in use.

## **8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

**ENGINEERING CONTROLS:** Provide adequate general and local exhaust ventilation to maintain concentration below exposure limits.

**EYE / FACE PROTECTION:** Safety Glasses

**SKIN PROTECTION:** None

**RESPIRATORY PROTECTION:** In case of leakage, use self-contained breathing apparatus.

**OTHER PROTECTIVE EQUIPMENT:** Safety shoes when handling cylinders.

## **9. PHYSICAL AND CHEMICAL PROPERTIES**

**APPEARANCE:** Colorless

**ODOR:** Pungent

**PHYSICAL PRESSURE:** Gas

**VAPOR PRESSURE:** N/A<sub>p</sub>

**VAPOR DENSITY:** (AIR=1): 1.105

**BOILING POINT (C):** N/A<sub>p</sub>

**SOLUBILITY IN WATER:** 0.071

**SPECIFIC GRAVITY (H<sub>2</sub>O=1):** Gas

**EVAPORATION RATE:** Gas

**ODOR THRESHOLD:** .6-.7 ppm

## **10. STABILITY AND REACTIVITY**

**STABILITY:** Stable under normal storage conditions.

**CONDITIONS TO AVOID:** Storage in poorly ventilated areas. Storage near heat source.

**MATERIALS TO AVOID:** Copper, zinc, mercury, and their alloys, and strong mineral acids.

**HAZARDOUS POLYMERIZATION:** Will not occur.

**HAZARDOUS DECOMPOSITION:** None

## 11. TOXICOLOGICAL INFORMATION

LETHAL CONCENTRATION (LC50): 7338 ppm (NH3), rat 1 hour.

LETHAL DOSE 50 (LC50): N/Ap

TERATOGENICITY: N/Ap

REPRODUCTIVE EFFECTS: N/Ap

MUTAGENICITY: N/Ap

## 12. ECOLOGICAL INFORMATION

No adverse ecological effects are expected.

## 13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: Limited amount of gas may be released to atmosphere under appropriate conditions. Dispose of non-refillable cylinders in accordance with federal, state and local regulations. Allow gas to vent slowly to atmosphere in an unconfined are or exhaust hood. If the cylinders are the refillable type, return cylinders to supplier with any valve outlet plugs or caps secured and valve protection caps in place.

## 14. TRANSPORT INFORMATION

CONCENTRATION: 26-100,000 ppm

DOT DESCRIPTION (US ONLY):

PROPER SHIPPING NAME: Compressed gases, n.o.s

HAZARD CLASS: 2.2 (nonflammable)

IDENTIFICATION NUMBER: UN1956

REPORTABLE QUANTITIES: 100 lb. (NH3)

LABELING: NONFLAMMABLE GAS

ADR / RID (EU ONLY): Class 2, 1A

SPECIAL PRECAUTIONS: Cylinders should be transported in secure upright position in a well ventilated truck.

## 15. REGULATORY INFORMATION

OSHA: Process Safety Management: Minor component is listed in appendix A 29 CFR 1910.119 as a highly hazardous chemical.

TSCA: Mixture is not listed in TSCA inventory.

SARA: The threshold planning quantity for this mixture is 10,000 lbs.

EU NUMBER: N/Av

NUMBER IN ANNEX 1 OF DIR 67/548: Mixture is not listed in annex 1.

EU CLASSIFICATION: N/Ap

R: 20

S: 9

## 16. OTHER INFORMATION

OTHER PRECAUTIONS: Protect containers from physical damage. Do not deface cylinders or labels. Cylinders should be refilled by qualified producers of compressed gas. Shipment of a compressed gas cylinder which has not been filled by the owner or with his written consent is a violation of federal law (49 CFR).

ABBREVIATIONS: N/Ap - Not Applicable N/Av - Not Available SA - Simple Asphyxiant NE - None Established

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