Section 1: Identification

Product identifier

Product Name • **Anhydrous Ammonia**

Relevant identified uses of the substance or mixture and uses advised against

Recommended use • Fertilizer, refrigerant gas, manufacture of plastics, explosives, pesticides, detergents, and other chemicals

Details of the supplier of the safety data sheet

Manufacturer • Dakota Gasification
420 County Road 26
Beulah, ND 58523-9400
United States

Telephone (General) • (701) 873-2100

Emergency Contact Information

Email • DGCEmergency@bepc.com

Manufacturer • (701) 873-6600

CHEMTREC • 800-424-9300

Section 2: Hazard Identification

United States (US)

According to OSHA 29 CFR 1910.1200 HCS

Classification of the substance or mixture

OSHA HCS 2012 • Flammable Gases 2 - H221
Liquefied Gas - H280
Skin Corrosion 1A - H314
Serious Eye Damage 1 - H318
Acute Toxicity Inhalation 3 - H331
Hazards Not Otherwise Classified - Health Hazard - Frostbite

Label elements

OSHA HCS 2012

DANGER

Hazard statements • Flammable gas - H221
Contains gas under pressure; may explode if heated - H280
Causes severe skin burns and eye damage. - H314

Causes serious eye damage - H318
Toxic if inhaled - H331

Precautionary statements

Prevention
- Keep away from heat, sparks, open flames and/or hot surfaces. - No smoking. - P210
  Do not breathe gas. - P260
  Wash thoroughly after handling. - P264
  Use only outdoors or in a well-ventilated area. - P271
  Wear protective gloves/protective clothing/eye protection/face protection. - P280

Response
- Eliminate all ignition sources if safe to do so. - P381
  IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. - P304+P340
  Call a POISON CENTER or doctor/physician. - P311
  IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. - P303+P361+P353
  Specific treatment, see supplemental first aid information. - P321
  Wash contaminated clothing before reuse. - P363
  IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. - P305+P351+P338
  Immediately call a POISON CENTER or doctor/physician. - P310
  IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. - P301+P330+P331

Storage/Disposal
- Store in a well-ventilated place. Keep container tightly closed. - P403+P233
  Store locked up. - P405
  Dispose of content and/or container in accordance with local, regional, national, and/or international regulations. - P501

Other hazards

OSHA HCS 2012
- Contact with gas or liquefied gas will cause burns, severe injury and/or frostbite. Under United States Regulations (29 CFR 1910.1200 - Hazard Communication Standard), this product is considered hazardous.

Canada

According to WHMIS

Classification of the substance or mixture

WHMIS
- Compressed Gas - A
  Flammable Gases - B1
  Very Toxic - D1A
  Corrosive - E

Label elements

WHMIS

- Compressed Gas - A
  Flammable Gases - B1
  Very Toxic - D1A
  Corrosive - E

Other hazards

WHMIS
- Contact with gas or liquefied gas will cause burns, severe injury and/or frostbite.
  In Canada, the product mentioned above is considered hazardous under the Workplace Hazardous Materials Information System (WHMIS).

Section 3 - Composition/Information on Ingredients

Substances

- Material does not meet the criteria of a substance.

Mixtures

Composition					
Chemical Name	**Identifiers**	**%**	**LD50/LC50**	**Classifications According to Regulation/Directive**	**Comments**
Ammonia	**CAS:**7664-41-7	99% TO 99.6%	Inhalation-Rat LC50 • 2000 ppm 4 Hour(s)	**OSHA HCS 2012:** Eye Dam. 1; Skin Corr. 1A; Flam. Gas 2; Press. Gas - Liq.; Acute Tox. 3 (Inhalation)	NDA
Ammonium hydroxide	**CAS:**1336-21-6	0.4% TO 1%	Ingestion/Oral-Rat LD50 • 350 mg/kg	**OSHA HCS 2012:** Acute Tox, 2 (Oral); Eye Dam. 1; Skin Corr. 1A	NDA

Section 4: First-Aid Measures

Description of first aid measures

Inhalation
- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Administer oxygen if breathing is difficult. Give artificial respiration if victim is not breathing. Get medical attention immediately.

Skin
- If frostbite has occurred, seek medical attention immediately; do NOT rub the affected area(s) or flush them with water. In order to prevent further tissue damage, do NOT attempt to remove frozen clothing from frostbitten areas. If frostbite has not occurred, immediately and thoroughly wash contaminated skin with soap and water.

Eye
- If eye tissue is frozen, seek medical attention immediately; if tissue is not frozen, immediately and thoroughly flush the eyes with large amounts of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. If irritation, pain, swelling, lacrimation or photophobia persist, get medical attention as soon as possible.

Ingestion
- If frostbite has occurred, seek medical attention immediately; do NOT rub the affected area(s) or flush them with water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Get medical attention immediately.

Most important symptoms and effects, both acute and delayed

- Refer to Section 11 - Toxicological Information.

Indication of any immediate medical attention and special treatment needed

Notes to Physician
- After inhalation, watch for delayed symptoms of ammonia exposure such as pulmonary edema. Treat symptomatically, administering analgesics and corticosteroids as necessary. Surgical intervention may be needed to maintain an airway. Watch for chemical pneumonitis.

Other information

- Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. RESCUERS SHOULD NOT ATTEMPT TO RETRIEVE VICTIMS OF EXPOSURE TO GASES WITHOUT ADEQUATE PERSONAL PROTECTIVE EQUIPMENT. At a minimum, Self-Contained Breathing Apparatus must be worn. Victim(s) who experience any adverse effect after over-exposure to this gas mixture must be taken for medical attention. Rescuers should be taken for medical attention if necessary. Take a copy of the label and the MSDS to physician or other health professional with victim(s).

Section 5: Fire-Fighting Measures

Extinguishing media

Suitable Extinguishing Media
- SMALL FIRES: Dry chemical or CO2.
  LARGE FIRES: Water spray or fog.

Unsuitable Extinguishing Media
- No data available

Special hazards arising from the substance or mixture

Unusual Fire and Explosion Hazards
- EXTREMELY FLAMMABLE
  Will form explosive mixtures with air.
  Vapors may travel to source of ignition and flash back.
  Cylinders exposed to fire may vent and release flammable gas through pressure relief devices.
  Containers may explode when heated.
  Ruptured cylinders may rocket.

Hazardous Combustion Products
- No data available

Advice for firefighters

- Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations where direct contact with the substance is possible.
  Wear positive pressure self-contained breathing apparatus (SCBA).
  DO NOT EXTINGUISH A LEAKING GAS FIRE UNLESS LEAK CAN BE STOPPED
  Move containers from fire area if you can do it without risk.
  FIRE: If tank, rail car or tank truck is involved in a fire, ISOLATE for 1600 meters (1 mile) in all directions; also, consider initial evacuation for 1600 meters (1 mile) in all directions.
  FIRE INVOLVING TANKS: ALWAYS stay away from tanks engulfed in fire.
  FIRE INVOLVING TANKS: Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
  FIRE INVOLVING TANKS: Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
  FIRE INVOLVING TANKS: Cool containers with flooding quantities of water until well after fire is out.
  FIRE INVOLVING TANKS: Do not direct water at source of leak or safety devices; icing may occur.
  FIRE INVOLVING TANKS: For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

Section 6 - Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Personal Precautions
- Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Do not walk through spilled material. Ventilate the area before entry. Wear appropriate personal protective equipment, avoid direct contact. Avoid contact with skin and eyes. Do not breathe gas.

Emergency Procedures
- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area) As an immediate precautionary measure, isolate spill or leak area for at least 100 meters (330 feet) in all directions. Stop leak if you can do it without risk. Keep unauthorized personnel away. Keep out of low areas. Stay upwind. LARGE SPILL: Consider initial downwind evacuation for at least 800 meters (1/2 mile)

Environmental precautions

- Prevent spreading of vapors through sewers, ventilation systems and confined areas.

Methods and material for containment and cleaning up

Containment/Clean-up Measures

- All equipment used when handling the product must be grounded.

Stop leak if you can do it without risk.
If possible, turn leaking containers so that gas escapes rather than liquid.
Use water spray to reduce vapors; do not put water directly on leak, spill area or inside container.
Do not direct water at spill or source of leak.
Isolate area until gas has dispersed.

Section 7 - Handling and Storage

Precautions for safe handling

Handling

- Keep away from heat and ignition sources – No Smoking. Take precautionary measures against static charges. All equipment used when handling the product must be grounded. Use only non-sparking tools. Use only with adequate ventilation. Be aware of any signs of dizziness or fatigue, especially if work is done in a poorly ventilated area; exposures to fatal concentrations of this gas mixture could occur without any significant warning symptoms, due to olfactory fatigue or oxygen deficiency. Cylinders should be firmly secured to prevent falling or being knocked-over. Use explosion-proof - electrical, ventilating and/or lighting equipment. Do not attempt to repair, adjust, or in any other way modify cylinders. If there is a malfunction or another type of operational problem, contact nearest distributor immediately. Empty containers retain product residue and can be hazardous. Do not cut, weld, puncture or incinerate container. Avoid contact with skin and eyes. Do not breathe gas. Wear appropriate personal protective equipment, avoid direct contact.

Conditions for safe storage, including any incompatibilities

Storage

- Cylinders should be stored in dry, well-ventilated areas away from sources of heat, ignition and direct sunlight. Do not allow area where cylinders are stored to exceed 52C (125F). Cylinders must be protected from the environment, and preferably kept at room temperature approximately 21C (70F). Protect cylinders against physical damage. Cylinders should be firmly secured to prevent falling or being knocked-over. Store locked up.

Section 8 - Exposure Controls/Personal Protection

Control parameters

Exposure Limits/Guidelines						
	Result	**ACGIH**	**Canada Ontario**	**Canada Quebec**	**NIOSH**	**OSHA**
Ammonia (7664-41-7)	STELs	35 ppm STEL	35 ppm STEL	35 ppm STEV; 24 mg/m3 STEV	35 ppm STEL; 27 mg/m3 STEL	Not established
	TWAs	25 ppm TWA	25 ppm TWA	25 ppm TWAEV; 17 mg/m3 TWAEV	25 ppm TWA; 18 mg/m3 TWA	50 ppm TWA; 35 mg/m3 TWA

Exposure controls

Engineering Measures/Controls

- Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Use explosion-proof - electrical, ventilating and/or lighting equipment.

Personal Protective Equipment

Respiratory

- Follow the OSHA respirator regulations found in 29 CFR 1910.134 Use a NIOSH/MSHA approved respirator if exposure limits are exceeded or symptoms are experienced.

Eye/Face

- Wear safety goggles.

Skin/Body

- Wear leather gloves when handling cylinders.

Environmental Exposure Controls

- Controls should be engineered to prevent release to the environment, including procedures to prevent spills, atmospheric release and release to waterways. Follow best practice for site management and disposal of waste.

Key to abbreviations

ACGIH = American Conference of Governmental Industrial Hygiene
NIOSH = National Institute of Occupational Safety and Health
OSHA = Occupational Safety and Health Administration
STEL = Short Term Exposure Limits are based on 15-minute exposures
TWAEV = Time-Weighted Average Exposure Value
TWA = Time-Weighted Averages are based on 8h/day, 40h/week exposures

Section 9 - Physical and Chemical Properties

Information on Physical and Chemical Properties

Material Description			
Physical Form	Gas	Appearance/Description	Colorless gas with a strong, penetrating, pungent odor.
Color	Colorless	Odor	Pungent
Odor Threshold	1 to 50 ppm		
General Properties			
Boiling Point	-28 F(-33.3333 C) @ one atmosphere	Melting Point	-108 F(-77.7778 C) @ one atmosphere
Decomposition Temperature	No data available	pH	10.6 to 11.6
Specific Gravity/Relative Density	0.5970 (of the gas at 32 F and 1 atm) (air = 1)	Bulk Density	38 lb(s)/ft³ liquid @ 20 F
Water Solubility	510 g/kg	Solvent Solubility	Water; Alcohol; Chloroform; Ether
Viscosity	No data available		
Volatility			
Vapor Pressure	No data available	Vapor Density	0.6 Air=1 @ 32 F
Evaporation Rate	Rapid at ambient temperatures	Volatiles (Vol.)	100 %
Flammability			
Flash Point	No data available	UEL	25 %
LEL	16 %	Autoignition	1204 F(651.1111 C)
Flammability (solid, gas)	Flammable Gas.		
Environmental			
Octanol/Water Partition coefficient	No data available		

Other Information

- No additional physical and chemical parameters noted.

Section 10: Stability and Reactivity

Reactivity

- No dangerous reaction known under conditions of normal use.

Chemical stability

- Stable under normal temperatures and pressures.

Possibility of hazardous reactions

- Hazardous polymerization will not occur.

Conditions to avoid

- Avoid contact with heat and ignition sources.

Incompatible materials

- Forms explosive compounds with mercury, halogens, hypochlorites, iodine, and amides. Corrosive to copper, brass, silver, zinc, and galvanized steel. Certain high tensile strength steels have developed stress-corrosion cracking in ammonia contaminated with small quantities of air. Forms explosive products when in contact with calcium, hypochlorites bleaches, halogens, gold, mercury, and silver. Heat is generated when ammonia is dissolved in water, and a harmful visible vapor cloud is typically produced from contact with water.

Hazardous decomposition products

- The products of combustion are mainly nitrogen and water but small traces of ammonium nitrate, nitrogen dioxide are also found. Ammonia begins to dissociate releasing hydrogen and nitrogen when heated to approximately 850ºF at atmospheric pressure.

Section 11 - Toxicological Information

Information on toxicological effects

Component Name	CAS	Data
Ammonia (99% TO 99.6%)	7664-41-7	**Acute Toxicity:** ihl-rat LC50:2000 ppm/4H; skn-rat LD50:4840 mg/m3/60M; **Tumorigen/Carcinogen:** orl-rat TDLo:1680 mg/kg/24W-C
Ammonium hydroxide (0.4% TO 1%)	1336-21-6	**Acute Toxicity:** orl-rat LD50:350 mg/kg; **Irritation:** eye-rbt 44 ug SEV

GHS Properties	Classification
Acute toxicity	**OSHA HCS 2012**•Acute Toxicity 3 (Inhalation)
Aspiration Hazard	**OSHA HCS 2012**•No data available
Carcinogenicity	**OSHA HCS 2012**•No data available
Germ Cell Mutagenicity	**OSHA HCS 2012**•No data available
Skin corrosion/Irritation	**OSHA HCS 2012**•Skin Corrosion 1A
Skin sensitization	**OSHA HCS 2012**•No data available
STOT-RE	**OSHA HCS 2012**•No data available
STOT-SE	**OSHA HCS 2012**•No data available
Toxicity for Reproduction	**OSHA HCS 2012**•No data available
Respiratory sensitization	**OSHA HCS 2012**•No data available
Serious eye damage/Irritation	**OSHA HCS 2012**•Serious Eye Damage 1

Route(s) of entry/exposure
- Inhalation, Skin, Eye, Ingestion

Potential Health Effects

Inhalation

Acute (Immediate)
- Toxic if inhaled. Ammonia is extremely destructive to mucous membrane tissue of the upper respiratory tract. Inhalation of elevated concentrations may be fatal. Inhalation may cause inflammation and accumulation of fluid in the lungs.

Chronic (Delayed)
- No data available

Skin

Acute (Immediate)
- Causes severe skin burns and eye damage. Severe tissue damage to the skin can occur from exposure to liquids if contact is prolonged (more than a few minutes). Dilute aqueous solutions (less than 5%) seldom cause serious burns, but are moderately irritating. Liquids are corrosive to body tissue. Exposure to concentrated vapor or solution can cause stinging pain, redness of the skin, and blisters, especially on moist skin areas. Contact with liquefied ammonia can cause severe frost bite burns resulting in deep ulcerations.

Chronic (Delayed)	• No data available

Eye

Acute (Immediate)	• Causes serious eye damage. Low concentrations of 20-50 ppm may produce eye irritation after five minutes. High concentrations of gas or concentrated ammonium hydroxide, (ammonia dissolved in water), may cause swelling and sloughing of surface cells. High ammonia concentrations can destroy tissues of the eyes causing permanent blindness. Contact with liquid can produce severe frostbite or freezing.
Chronic (Delayed)	• No data available

Ingestion

Acute (Immediate)	• Swallowing ammonium hydroxide, (ammonia dissolved in water), causes immediate burning in the mouth and throat. Concentrated solutions cause severe pain in the mouth, chest, and abdomen; swallowing difficulty; drooling; and vomiting. Acute burns to the esophagus and perforation of the esophagus or stomach may occur.
Chronic (Delayed)	• No data available

Key to abbreviations

LC = Lethal Concentration
LD = Lethal Dose
SEV = Severe

Section 12 - Ecological Information

Toxicity

• Ammonia in the form of a liquid, concentrated solution, or at a high vapor concentration, will destroy most living organisms.

Persistence and degradability

• Atmospheric ammonia can be readily removed from the air by rain or snow washout. It can dissolve in clouds or fog. In surface water, groundwater, or sediment, ammonia can undergo sequential transformation by processes in the nitrogen cycle eventually producing elemental nitrogen. In soil, ammonia can serve as a nutrient source which can be taken up by plants and other organisms. Ammonia in soil can be rapidly transformed to nitrate by microbes.

Bioaccumulative potential

• Material data lacking.

Mobility in Soil

• Ammonia in soil will either be leached through the soil or be taken up by plants or other organisms. Very high localized concentrations of ammonia could become toxic to plants, organisms, or microbes.

Other adverse effects

Potential Environmental Effects	• Ammonia present in water as ammonium ions at sufficiently high concentrations can be highly toxic for fish and toxic for aquatic plants.

Other Information

• If released to surface water, ammonia volatilizes to the atmosphere. The rate of volatilization of ammonia from water will increase with increasing pH and temperature.

Section 13 - Disposal Considerations

Waste treatment methods

Product waste • Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Packaging waste • Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Section 14 - Transport Information

	14.1 UN number	14.2 UN proper shipping name	14.3 Transport hazard class(es)	14.4 Packing group	14.5 Environmental hazards
DOT	UN1005	Ammonia, anhydrous	2.2	NDA	NDA
	UN1005	Ammonia, anhydrous	2.3,8	NDA	NDA
TDG	UN1005	AMMONIA, ANHYDROUS	2.3,8	NDA	NDA
IATA/ICAO	UN1005	Ammonia, anhydrous	2.3,8	NDA	NDA

Special precautions for user • Cylinders should be transported in a secure position, in a well-ventilated vehicle. The transportation of compressed gas cylinders in automobiles or in closed-body vehicles can present serious safety hazards. If transporting these cylinders in vehicles, ensure these cylinders are not exposed to extremely high temperatures (as may occur in an enclosed vehicle on a hot day). Additionally, the vehicle should be well-ventilated during transportation.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code • Not relevant.

Section 15 - Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture

SARA Hazard Classifications • Acute, Fire, Pressure(Sudden Release of)

State Right To Know				
Component	**CAS**	**MA**	**NJ**	**PA**
Ammonia	7664-41-7	Yes	Yes	Yes
Ammonium hydroxide	1336-21-6	Yes	Yes	Yes

Inventory				
Component	**CAS**	**Canada DSL**	**Canada NDSL**	**TSCA**
Ammonia	7664-41-7	Yes	No	Yes
Ammonium hydroxide	1336-21-6	Yes	No	Yes

Canada

Labor

Canada - WHMIS - Classifications of Substances

•Ammonia	7664-41-7	A, B1, D1A, E; E (Ammonia solution, in water - 10-35% Ammonia, 35-50% Ammonia, >50% Ammonia)
•Ammonium hydroxide	1336-21-6	E

Canada - WHMIS - Ingredient Disclosure List

•Ammonia	7664-41-7	1 %
•Ammonium hydroxide	1336-21-6	1 %

Environment

Canada - CEPA - Priority Substances List

•Ammonia	7664-41-7	Priority Substance List 2 (substance considered toxic, in the aquatic environment)
•Ammonium hydroxide	1336-21-6	Not Listed

United States

Labor

U.S. - OSHA - Process Safety Management - Highly Hazardous Chemicals

•Ammonia	7664-41-7	10000 lb TQ (anhydrous); 15000 lb TQ (solution, >44% Ammonia by weight)
•Ammonium hydroxide	1336-21-6	Not Listed

U.S. - OSHA - Specifically Regulated Chemicals

•Ammonia	7664-41-7	Not Listed
•Ammonium hydroxide	1336-21-6	Not Listed

Environment

U.S. - CAA (Clean Air Act) - 1990 Hazardous Air Pollutants

•Ammonia	7664-41-7	Not Listed
•Ammonium hydroxide	1336-21-6	Not Listed

U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities

•Ammonia	7664-41-7	100 lb final RQ; 45.4 kg final RQ
•Ammonium hydroxide	1336-21-6	1000 lb final RQ; 454 kg final RQ

U.S. - CERCLA/SARA - Radionuclides and Their Reportable Quantities

•Ammonia	7664-41-7	Not Listed
•Ammonium hydroxide	1336-21-6	Not Listed

U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA RQs

•Ammonia	7664-41-7	100 lb EPCRA RQ
•Ammonium hydroxide	1336-21-6	Not Listed

U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs

•Ammonia	7664-41-7	500 lb TPQ
•Ammonium hydroxide	1336-21-6	Not Listed

U.S. - CERCLA/SARA - Section 313 - Emission Reporting

•Ammonia	7664-41-7	1.0 % de minimis concentration (includes anhydrous Ammonia and aqueous Ammonia from water dissociable Ammonium salts and other sources, 10% of total aqueous Ammonia is reportable under this listing)
•Ammonium hydroxide	1336-21-6	Not Listed

U.S. - CERCLA/SARA - Section 313 - PBT Chemical Listing

•Ammonia	7664-41-7	Not Listed
•Ammonium hydroxide	1336-21-6	Not Listed

U.S. - EPA - Designated Generic Categories - Aqueous Ammonia

•Ammonia	7664-41-7	Not Listed
•Ammonium hydroxide	1336-21-6	NH3 Equiv. Wt. % = 48.59

United States - California

Environment

U.S. - California - Proposition 65 - Carcinogens List

•Ammonia	7664-41-7	Not Listed
•Ammonium hydroxide	1336-21-6	Not Listed

U.S. - California - Proposition 65 - Developmental Toxicity

•Ammonia	7664-41-7	Not Listed
•Ammonium hydroxide	1336-21-6	Not Listed

U.S. - California - Proposition 65 - Maximum Allowable Dose Levels (MADL)

•Ammonia	7664-41-7	Not Listed
•Ammonium hydroxide	1336-21-6	Not Listed

U.S. - California - Proposition 65 - No Significant Risk Levels (NSRL)

•Ammonia	7664-41-7	Not Listed
•Ammonium hydroxide	1336-21-6	Not Listed

U.S. - California - Proposition 65 - Reproductive Toxicity - Female

•Ammonia	7664-41-7	Not Listed
•Ammonium hydroxide	1336-21-6	Not Listed

U.S. - California - Proposition 65 - Reproductive Toxicity - Male

•Ammonia	7664-41-7	Not Listed
•Ammonium hydroxide	1336-21-6	Not Listed

United States - Pennsylvania

Labor

U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List

- Ammonia 7664-41-7
- Ammonium hydroxide 1336-21-6

U.S. - Pennsylvania - RTK (Right to Know) - Special Hazardous Substances

- Ammonia 7664-41-7 Not Listed
- Ammonium hydroxide 1336-21-6 Not Listed

Section 16 - Other Information

Last Revision Date	• 29/September/2019
Preparation Date	• 26/August/2013
Disclaimer/Statement of Liability	• The information contained in this Safety Data Sheet (SDS) is believed to be correct since it was obtained from sources we believe are reliable. However no representation, guarantees or warranties of any kind are made as to its accuracy, suitability for particular applications, hazards connected with the use of the material, or the results to be obtained from the use thereof. User assumes all risks and liability of any use, processing or handling of any material, variations in methods, conditions and equipment used to store, handle, or process the material and hazards connected with the use of the material are solely the responsibility of the user and remain at his sole discretion. Compliance with all applicable federal, state, and local laws and regulations remains the responsibility of the user, and the user has the responsibility to provide a safe work place to examine all aspects of its operation and to determine if or where precautions, in addition to those described herein, are required.