PREFERRED CHEMICAL NAME:	AMMONIA	CAS #:	7664-41-7 (ammonia) 1336-21-6 (ammonium hydroxide)
Molecular Wt. 35.05	**Molecular Formula:** H_5NO	**Structural Molecular Formula:**	NH_4OH
Alternate Chemical Names:	Ammonia Solution, 20 wt% to 44 wt%; Ammonium Hydroxide		
DOT UN # : 2672 (10-35%) 2073 (35-50%)	**RTECS # :** BQ9625000	**NFPA 704: H-F-R-Special Hazard:**	3 – 1 – 0
Physical State - Description:	Colorless liquid; suffocating odor Odor Threshold: 47.0 ppm		

PHYSICAL DATA

Property	Value	Source	Property	Value	Source
Melting – Freezing Point:	-106.6°F (-77°C)	GENIUM	Boiling Point:		
Critical Temperature:			Critical Pressure:		
Autoignition Temperature:			Flash Point:	Non-Flammable	GENIUM
Lower Flammability Limit:	16% v/v	GENIUM	Upper Flammability Limit:	25% v/v	GENIUM
Total Vapor Pressure (absolute):	4.56 psia @ 70°F (21.1°C) @ 19.10 wt%	CHEM	Vapor Density (air = 1):	0.6	GENIUM
Liquid Density:	0.9229 g/ml @ 68°F (20°C) @ 20 wt%	CHEM	Vapor Density:		
Specific Gravity (water = 1):			Conversion:		

HAZARD OVERVIEWS

Hazard	Overview	Source
HEALTH	Corrosive, causes severe burns to eyes/skin/respiratory tract. Toxic. Also Causes: blindness; exposure to high levels may be fatal.	GENIUM
FIRE	Vapor may burn. Extinguish with dry chemical, water spray, carbon dioxide, or regular foam.	GENIUM
REACTIVITY	Stable. Hazardous polymerization cannot occur. Avoid: heat. Incompatible with: copper; zinc; galvanized surfaces; sulfuric; hydrochloric; heavy metals; halide salts; acrolein; acrylic acid; chlorosulfonic acid; dimethyl sulfate; fluorine; gold; aqua regia; oleum; beta-propiolactone; propylene oxide; silver oxide; silver nitrate; silver oxide and ethyl alcohol; nitromethane; silver permanganate; halogens. Hazardous decomposition products: carbon dioxide; toxic ammonia; nitrogen oxides.	GENIUM
SPECIAL HAZARD	None.	GENIUM

TOXICITY/EXPOSURE INFORMATION

Data Term	Toxic Limit Value	Source	Data Term	Toxic Limit Value	Source
ERPG-1 :	Listed for Ammonia	AIHA	TLV TWA :	Listed for Ammonia	ACGIH
ERPG-2 :	Listed for Ammonia	AIHA	TLV STEL :	Listed for Ammonia	ACGIH
ERPG-3 :	Listed for Ammonia	AIHA	PEL TWA:	Listed for Ammonia	OSHA
IDLH :	Listed for Ammonia	NIOSH	PEL STEL:	None Listed	OSHA

Classification	10 Min Exposure	30 Min Exposure	1 Hour Exposure	4 Hour Exposure	8 Hour Exposure
AEGL-1 :	Listed for Ammonia	Listed for Ammonia	Listed for Ammonia	Listed for Ammonia	Listed for Ammonia
AEGL-2 :	Listed for Ammonia	Listed for Ammonia	Listed for Ammonia	Listed for Ammonia	Listed for Ammonia
AEGL-3 :	Listed for Ammonia	Listed for Ammonia	Listed for Ammonia	Listed for Ammonia	Listed for Ammonia

See "Listing of Substance on Pertinent Safety/Environmental Programs" Section on Next Page

LISTING OF SUBSTANCE ON PERTINENT SAFETY/ENVIRONMENTAL PROGRAMS

Y/N	Program	Statute	Regulation	Limits or Values		
N	EPCRA EHS	Section 302 of SARA Title III Emergency Planning	40 CFR Part 355	TPQ:		
				RQ:		
Y	CERCLA	Section 304 of SARA Title III Emergency Notification	40 CFR Part 302	RQ:	1,000	lbs
Y	EPCRA Section 313	Section 313 of SARA Title III Toxic Release Inventory Reporting	40 CFR Part 372	MANUFACTURED/PROCESSED: 25,000 lbs OTHERWISED USED: 10,000 lbs 10 percent of total aqueous ammonia is reportable under this listing		
Y	RMP	Section 112(r) of CAAA 1990 Risk Management Plan	40 CFR Part 68	TQ:	20,000 (conc 20% or greater)	lbs
N	PSM	Section 304 of CAAA 1990 Process Safety Management	29 CFR Part 1910.119	TQ:		
Y	NDEP-CAPP	Nevada Revised Statutes 459.3816 Chemical Accident Prevention Program	NAC 459.9533	TQ:	20,000 (note 2)	lbs

Note 2: The threshold quantity must be applied to the fraction of the chemical in the actual mixture.