

# AQUA AMMONIA (19-30%) -- Chemical Fact Sheet

<b><i>What is it?!</i></b>	Aqua Ammonia (also called, aqueous ammonia and ammonium hydroxide) is a clear, colorless liquid with a pungent, suffocating odor. Its odor allows it to be noticed at low concentrations. It is formed when anhydrous ammonia dissolves in water. Use of Aqueous Ammonia, where possible, is a safer alternative than Anhydrous Ammonia.
<b><i>Where does it come from?</i></b>	Ammonia is created by mixing nitrogen and hydrogen gases in the presence of a catalyst or as a by-product from the petroleum refining process. Aqua ammonia is created by dissolving anhydrous ammonia in water.
<b><i>What are the common uses for it?</i></b>	Household cleaner Reduction of nitrogen oxides stack emissions at power plants Use for water treatment plant Pesticides
<b><i>How is it transported in CCC?</i></b>	Aqueous Ammonia is shipped by truck.
<b><i>How is it stored in CCC?</i></b>	Aqueous Ammonia is stored in tanks.

## Health Hazards from Exposure

<b><i>Exposure Route</i></b>	<b><i>Symptoms</i></b>	<b><i>First Aid</i></b>
Inhalation (low concentrations)	Burning sensation Headache Nausea Coughing Wheezing Shortness of breath	Remove to fresh air. If breathing is difficult give oxygen. Get medical attention if symptoms persist.
Inhalation (high concentrations & prolonged exposure)	Burning sensation Coughing, gagging Chest pain Fluid in lungs Suffocation, death	Remove to fresh air, get medical attention including oxygen administration. Initiate CPR if breathing has stopped.
Ingestion	Burns of mouth, throat, and stomach Vomiting Diarrhea	DO NOT INDUCE VOMITING. Give large quantities of water. Seek medical attention.

Eyes	Blurred Vision Redness Temporary blindness Permanent blindness	Rinse eyes with water for at least 15 minutes. Seek medical attention.
Skin	Irritates skin Redness of Skin Skin burns	Wash skin with water for 15 minutes. Remove all contaminated clothing and wash before reuse. Seek medical attention

**Contra Costa RMP/CalARP Companies  
that Use, Store or Manufacture this Chemical<sup>2</sup>**

Air Liquide Rodeo	Crockett Cogeneration	Marsh Landing Generating Station
Air Products Marathon	EBMUD Lafayette Water Treatment	PG&E Gateway Generating Station
Bollman Water Treatment Plant	EBMUD Orinda Water Treatment Plant	Phillips 66 San Francisco Refinery
City of Brentwood Water Treatment Plant	EBMUD Sobrante Filter Plant	Randall-Bold Water Treatment Plant
Chevron Richmond Refinery	EBMUD Walnut Creek Water Treatment	Riverview Energy Center
Corteva Agriscience	Los Medanos Energy Center	Shell Martinez Refinery
Criterion Catalysts	Marathon Martinez Refinery	

**For More Information**

US Environmental Protection Agency and Technology Transfer Network	<a href="http://www.epa.gov/swerceppo">www.epa.gov/swerceppo</a> <a href="http://www.epa.gov/ttn/uatw/hapindex.html">www.epa.gov/ttn/uatw/hapindex.html</a>	(800)535-0202 EPCRA Hotline (919)541-0888
National Institute of Occupational Safety & Health and the Agency for Toxic Substances and Disease Registry	<a href="http://www.cdc.gov/niosh">www.cdc.gov/niosh</a> <a href="http://atsdr1.atsdr.cdc.gov:8080/hazdat.html">http://atsdr1.atsdr.cdc.gov:8080/hazdat.html</a>	(800)477-1544
Occupational Safety and Health Administration	<a href="http://www.osha.gov">www.osha.gov</a> <a href="http://www.osha-slc.gov/ChemSamp_data">www.osha-slc.gov/ChemSamp_data</a>	(202)219-8151 or (202)219-7056
ChemFinder®	<a href="http://Chemfinder.camsoft.com">http://Chemfinder.camsoft.com</a>	(800)315-7300
International Safety Cards	<a href="http://siri.org/msds/mf/cards/list.html">http://siri.org/msds/mf/cards/list.html</a>	
SDS Sites	<a href="http://www.msdonline.com">www.msdonline.com</a>	
Poison Control Center	<a href="http://www.calpoison.org">www.calpoison.org</a>	(800) 876 - 4766
California Health Service Department Sacramento	<a href="http://www.dhs.ca.gov">www.dhs.ca.gov</a>	(916) 540 - 3014
Contra Costa County Health Services – Hazardous Materials Department	<a href="http://www.cchealth.org/groups/hazmat">www.cchealth.org/groups/hazmat</a>	(925) 646 – 2286

*This is a brief summary of information on this chemical. For more detailed information you can obtain a Safety Data Sheet from Contra Costa Health Services. You can also call any of the companies listed above for more information.*

<sup>1</sup>This information was obtained from the Agency for Toxic Substances and Disease Registry website.

<sup>2</sup>The companies listed were obtained from Business Plans submitted to Contra Costa County Health Services Department.