

AMMONIA -- Chemical Fact Sheet

<i>What is it?</i> ¹	Anhydrous Ammonia is a colorless, corrosive and highly irritating gas with a sharp, suffocating odor. Its odor allows it to be noticed at low concentrations. It easily dissolves in water to form a solution called Ammonium Hydroxide or Aqueous Ammonia. Use of Aqueous Ammonia, where possible, is a safer alternative than Anhydrous Ammonia.
<i>Where does it come from?</i>	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.
<i>What are the common uses for it?</i>	Household cleaner as ammonia in water Fertilizer Refrigerant in industrial refrigerators and air conditioners Manufacturing of plastics, fibers, explosives and other chemicals Used in air pollution prevention equipment.
<i>How is it transported in CCC?</i>	Anhydrous Ammonia is shipped by truck.
<i>How is it stored in CCC?</i>	Anhydrous Ammonia is stored in pressurized tanks.

Health Hazards from Exposure

<i>Exposure Route</i>	<i>Symptoms</i>	<i>First Aid</i>
Inhalation (low concentrations)	Irritates nose, throat and lungs Burning Sensation Discomfort or difficulty in breathing, coughing	Remove to fresh air. 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.
Eyes	Severely irritates eyes Burning/discomfort Watering of eyes Eye burns	Rinse eyes with water for at least 5 minutes. Seek medical attention.
Skin	Irritates skin Burning/discomfort Skin burns	Wash skin with soapy water. Seek medical attention for all but minor exposure.

**Contra Costa RMP/CalARP Companies
that Use, Store or Manufacture this Chemical²**

Air Liquide America Corp	Dreisbach Enterprises	Safeway Beverage Plant
Air Liquide - Rodeo Hydrogen Plant	General Chemical – Bay Point Works	Sunset Packing & Cooling
Air Gas Dry Ice	Pittsburg Water Treatment	Tesoro Refinery
Antioch Water Treatment Plant	Ramar Foods	USS POSCO Industries
Linde	Rhodia	
Calpine Delta Energy Center	Martinez Water Treatment Plant	
Chevron – Richmond Refinery	Shell Martinez Refining Company	

For More Information

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

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

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

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