

# CHLORINE -- Chemical Fact Sheet

<b><i>What is it?<sup>1</sup></i></b>	Chlorine is a corrosive, greenish-yellow gas with a strong pungent, irritating odor. Its odor allows it to be noticed at low concentrations. It is used as a bleach and a water purifier. Chlorine is also a germ-killer and a disinfectant. It is used for these purposes in homes, hospitals, swimming pools, hotels, restaurants and other public places. Chlorine is also used in manufacturing plastics, pharmaceuticals, medical devices, safety equipment, computers, automobiles, aircraft parts and pesticides.
<b><i>Where does it come from?</i></b>	Chlorine is created by running an electrical current through a common table salt solution.
<b><i>What are the common uses for it?</i></b>	Household cleaner as a bleach Water purification Disinfectant in sewage treatment process Swimming pool disinfectant Manufacture of chlorinated chemicals
<b><i>How is it transported in CCC?</i></b>	Chlorine is by truck and railcar.
<b><i>How is it stored in CCC?</i></b>	Chlorine is in pressurized tanks or gas cylinders.

## Health Hazards from Exposure

<b><i>Exposure Route</i></b>	<b><i>Symptoms</i></b>	<b><i>First Aid</i></b>
Inhalation (low concentrations)	Irritates nose, throat and lungs Burning Sensation Discomfort or difficulty in breathing, coughing, or wheezing Headache, Nausea	Remove to fresh air. Seek medical attention.
Inhalation (high concentrations & prolonged exposure)	Burning sensation Coughing and gagging Nausea/vomiting Chest pain, labored breathing, Accumulation of fluid in lungs, 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 Swelling, burns	Rinse eyes with water for at least 5 minutes. Seek medical attention.
Skin	Irritates skin Burning/discomfort Redness	Wash skin with soapy water. Seek medical attention.

**Contra Costa RMP/CalARP Companies  
that Use, Store or Manufacture this Chemical<sup>1</sup>**

Antioch Water Treatment Plant	HASA Chemical
Veolia ES Technical Solutions	Pittsburg Water Treatment Plant
Chevron – Richmond Refinery	Randal-Bold Water Treatment Plant
Concord Community Park	San Ramon Olympic Pool
The Dow Chemical Company	Praxair Distribution

**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>	
MSDS Sites	<a href="http://www.chem.utah.edu/msds">www.chem.utah.edu/msds</a> <a href="http://www.msdsonline.com">www.msdsonline.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/gourps/hazmat">www.cchealth.org/gourps/hazmat</a>	(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.*

<sup>1</sup>This information was obtained from the websites listed above.

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