

OLEUM/SULFUR TRIOXIDE -- Chemical Fact Sheet

<i>What is it?</i> ¹	Oleum is a cloudy, gray, fuming, oily, corrosive liquid with a sharp, penetrating odor. When Oleum comes into contact with air following a spill, it releases Sulfur Trioxide. Sulfur Trioxide is a white gas having the appearance of fog. It also has a sharp, penetrating odor that is detectable at low concentrations. Because of the tendency to liberate Sulfur Trioxide on contact with air, Oleum is also known as “fuming Sulfuric Acid”.
<i>Where does it come from?</i>	Oleum is made by dissolving Sulfur Trioxide into Sulfuric Acid. Sulfur Trioxide is made from Sulfur Dioxide in the presence of a catalyst.
<i>What are the common uses for it?</i>	It is used in the oil refining process to make crude oil distillates into higher quality materials. Manufacture of soap Manufacture of high purity Sulfuric Acid for the electronic industry Manufacture of catalyst used in production of Sulfuric Acid.
<i>How is it transported in CCC?</i>	Oleum is shipped by truck and pipeline.
<i>How is it stored in CCC?</i>	Oleum is stored in covered 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 Sneezing, coughing	Remove to fresh air. Seek medical attention if symptoms persist.
Inhalation (high concentrations & prolonged exposure)	Burning sensation Coughing, gagging Chest tightness and 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	Severely 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**

General Chemical – Richmond
MECS Company
Tesoro Refinery
Rhodia

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 websites listed above.

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