


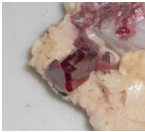






<p><b>Hg<sup>0</sup></b>  <b>Mercury</b> is a naturally occurring silvery liquid. A soda can full of mercury would weigh 10 pounds.  <b>Uses:</b>  Mercury is used in thermometers, fillings, and blood pressure gages today, but most of the mercury from New Almaden went to extract gold and silver from crushed rock. Precious metals combine with mercury.  <b>Toxicology:</b>  Liquid mercury is not very dangerous, but breathing vapors can cause drooling, dullness, and diarrhea.</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">   Symbol </div> <div style="text-align: center;">   droplet </div> </div>	<p><b>HgCH<sub>3</sub><sup>+2</sup></b>  <b>Methylmercury</b> is an ionic organic compound that can bind to proteins in animals. Natural methylmercury is made in very small quantities by bacteria in stagnant water lacking oxygen. The amount of methylmercury increases the higher the animal is on the food chain and the longer the animal lives. Man-made methylmercury was first seen as an industrial waste product from the production of plastics.  <b>Uses:</b>  Seed grain shippers used a pink solution of methylmercury to prevent early germination, and as a pesticide.  <b>Toxicology:</b>  Only man-made methylmercury has been linked to death. No detectable methylmercury was found in long-term residents of New Almaden.</p>	<p><b>Famous Manmade Toxic Compounds of mercury NOT found in New Almaden</b></p> <p><b>Hg(NO<sub>3</sub>)<sub>2</sub></b>  <b>“Mad Hatters” Poison or Mercury Nitrate</b> was used in making hats. It was absorbed through the skin causing drooling, shaking, and tipsy walking.</p>
<p><b>HgS</b>  <b>Cinnabar</b> is the mineral mined in New Almaden to produce mercury. Cinnabar crystals are ruby red but not very hard. When heated to over 1,000°F, cinnabar separates to mercury vapor, and sulfur gas.  <b>Uses:</b>  Native Americans used it as body paint. The vermilion powder is mixed with laquer to make Chinese carvings.  <b>Toxicology:</b>  Cinnabar is not toxic.</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">   Potato ore </div> <div style="text-align: center;">   Crystal </div> <div style="text-align: center;">   Vase </div> </div>	<p><b>HgO</b>  <b>Mercury Oxide</b> is a rare ionic compound. Mercury vapor is combined with oxygen in sunlight. Some mercury oxide was produced in the furnaces in New Almaden. It is found in the burnt ore (calcines) that are buried in the park.  <b>Uses:</b>  Mercury oxide is manufactured as a red-orange paint. It is also used in batteries.  <b>Toxicology:</b>  The quantities found in calcines, furnace waste, are too low to cause harm.</p>	<p><b>Hg<sub>2</sub>Cl<sub>2</sub> Calomel</b> was used as a toothpaste, a purgative, a diuretic, a skin lightener, and as a cure for syphilis. It is toxic, and causes a burning, itching rash.</p> <div style="text-align: right; margin-bottom: 10px;">  </div> <p><b>Hg(ONC)<sub>2</sub> Mercury Fulminate</b> is highly explosive. It is used to make fuses for bullets, and bombs.</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  </div> <div style="text-align: center;">  </div> </div>

### Mercury and Compounds of Mercury