# Not bioavailable Mercury species

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## cinnabar HgS mercuric sulfide, vermillion

This is the main ore of mercury, and the main form mercury in soil. Solubility is

Used as paint by ancient Chinese, Romans, and native Americans.



of 2x10<sup>-54</sup>



## methyl mercury HgCH<sub>3</sub>

This is the most toxic form of mercury. Methylmercury is made by bacteria in anoxic waters and muds. It is

the main mercury compound in fish. It is produced by bacteria in stagnant water.



It takes 70 days for half of it to leave your body.

# elemental mercury

# Quicksilver

Used in dental thermometers, gold



amalgams, mining, blood

pressure gauges, barometers, and mirrors. Breathing mercury vapor causes drooling, dullness, diarrhea, kidney and heart problems, and can cause death. It takes 8 days for half of what you breathe in to leave your body.

# mercury nitrate $Hg(NO_3)_2$ Mad Hatter's poison



Hatters used this to kink the straight hairs of rabbits so they'd stick together in felt. It dries out and cracks your brain.

#### mercury oxide HgO

Used as red paint on boats to kill barnacles





#### mercurous chloride Hg<sub>2</sub>Cl<sub>2</sub> calomel

A medicine for syphillis

## mercury chloride HgCl<sub>2</sub>

Calomel changes to this more toxic form in stomach acid.



## mercury fulminate Hg(ONC)<sub>3</sub>

This is explosive, and is used in blasting caps.



# Mercury thiocyanate Hg<sub>2</sub> (SCN)<sub>2</sub>

You can make "Pharoahs Snake" fireworks with this. If you eat the snake, you will die.

Mercury iodide