Mercury Essay, Research Paper

Mercury’s atomic number is 80. It’s mass is 201. Its density at 20 degrees Celsius is 13.456 g/cm cubed. It’s silvery-white and flows very easily. It conducts electricity fairly well, but is a poor conductor of heat. It was known to Chinese and Hindus before 2000 BC and was found in Egyptian tombs dating back to 1500 BC. It was named after Mercury, the Roman messenger to the gods(Hermes in Greek mythology). It is a violent poison to humans. It acts as a cumulative poison because there are few ways to excrete it from the body. It affects the brain and the rest of the central nervous system. Because of this most people who have had long exposure to it Most mercury poisoning occurs from eating fish that were caught in mercury-polluted water. The most common source of mercury pollution is industrial waste. It is rarely found free in nature, and its main ore is cinnabar (HgS). The mercury is obtained by heating the cinnabar in a current of air and as the sulfur gas has vaporized away, the mercury can be condensed into its familiar liquid form. It is the only known liquid metal. Mercury forms alloys, which are called amalgams, with many other elements. Its alloy with silver is used in dental fillings. Mercury forms many compounds. Some important compounds are: mercury chloride- a violent poison, mercuric oxide- found in some batteries, mercury fulminate- a detonator found in explosives, mercuric sulfide- vermillion, a bright red paint pigment, mercurous chloride- also called calomel, it is used in medicine as an antiseptic. Mercury is used in thermometers, barometers, diffusion pumps, mercury vapor lamps, advertising signs, mercury cells for caustic soda and chlorine production. Haberdashers (hat makers) used mercury to shape the felt in hats. Because of the long exposure, they often went mad. This inspired Lewis Carroll to include the character, the Mad Hatter, in Alice in Wonderland. Seeds used to be coated with mercury so the seeds would not rot in the ground. It was also used in anti-fouling paint. Some lumber also contained mercury so it would not rot. The government made the use of mercury in these ways against the law because of so many deaths because of long exposure to mercury.