

Application Of Hg in Bio-inorganic Chemistry Mercury Mercury is a chemical element with the symbol Hg and atomic number 80. Mercury was used for preserving wood, developing daguerreotypes, silvering mirrors, anti-fouling paints (discontinued in 1990), herbicides (discontinued in 1995), handheld maze games, cleaning, and road leveling devices in cars. It was allegedly used by allied spies to sabotage Luftwaffe planes: a mercury paste was applied to bare aluminium, causing the metal to rapidly corrode; this would cause structural failures. As electrodes in some types of electrolysis, batteries (mercury cells), sodium hydroxide and chlorine production, handheld games, catalysts, insecticides. Mercury was once used as a gun barrel bore cleaner. Chloralkali process: The largest industrial use of mercury during the 20th century was in electrolysis for separating chlorine and sodium from brine; mercury being the anode of the Castner-Kellner process. From the mid-18th to the mid-19th centuries, a process called "carroting" was used in the making of felt hats. Animal skins were rinsed in an orange solution (the term "carroting" arose from this color) of the mercury compound mercuric nitrate,  $\text{Hg}(\text{NO}_3)_2 \cdot 2\text{H}_2\text{O}$ . The psychological symptoms associated with mercury poisoning inspired the phrase "mad as a hatter". Lewis Carroll's "Mad Hatter" in his book Alice's Adventures in Wonderland was a play on words based on the older phrase, but the character himself does not exhibit symptoms of mercury poisoning. Historically, mercury was used extensively in hydraulic gold mining in order to help the gold to sink through the flowing water-gravel mixture. Gold and silver mining