



# Mercury



## History

- Discovered in ancient times, but no one knows where or who discovered it.
- Used by Egyptians in painting their tombs.
- Spanish and French painters used it to decorate caves.
- Fascinated people because it was a liquid that could dissolve gold.



## Chemical and Physical Properties

- Melting point: -38.83 degrees celcius
- Boiling point: 356.7 degrees celcius
- State of matter: liquid
- colour: silvery
- Density: 13.534g/cm
- Chemical reactions: concentrated nitric acid, concentrated sulphuric acid, fluorine, chlorine, bromine, and iodine

## Radioactive Isotopes

Two radioactive isotopes of mercury are used in medicine, mercury-197 and mercury-203. Both isotopes are used to study the brain and the kidneys. The isotopes are injected into the body where they travel to the brain and the kidneys. Inside these two organs, the isotopes give off radiation that is detected by instruments held above the body. The pattern of radiation provides information about how well the brain and kidneys are functioning.

## Isotopes

mercury-196  
mercury-198  
mercury-199  
mercury-200  
mercury-201  
mercury-202  
mercury-204.



Mercury occurs in many different forms such as: element mercury, metallic mercury, inorganic mercury, and organic mercury. Mercury occurs naturally and is found in the air, water and soil.

Mercury is mostly used in thermometers, thermostats, batteries and vehicles. Once you open your trunk of the car, a light turns on which contains mercury. Latex paint made before 1992, contains a large amount of mercury to prevent fungus. The vapor that is in Mercury is used in streetlights, and in all fluorescent lighting. The Chinese have known about the element before 2000 BC. which was found in Egyptian tombs. The year of this event was 1500 BC. Mercury was used to create amalgams for other metals around the year 500 BC.

