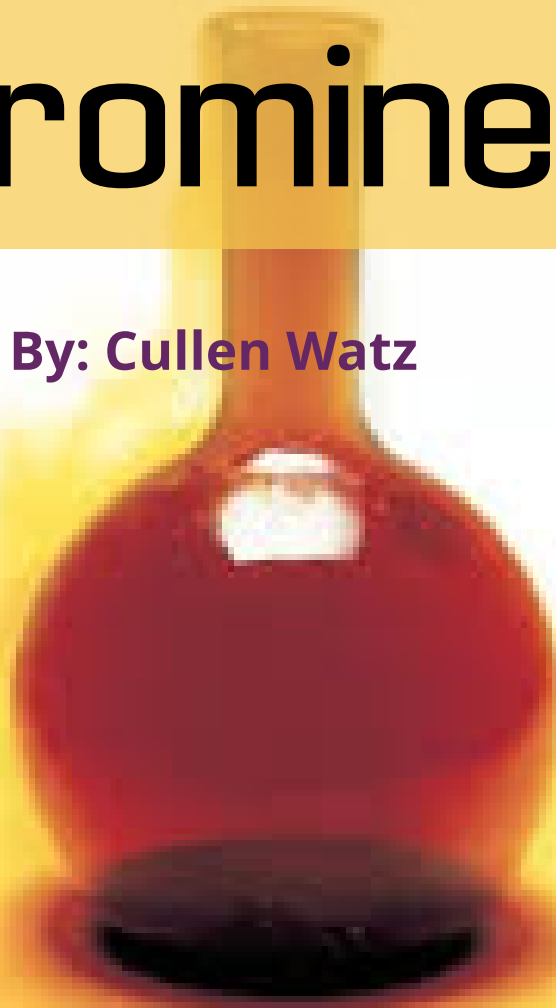


Bromine

By: Cullen Watz



Introduction

If you look at the periodic table you may come across number 35. what is it? It's bromine (bro-meen) of course! More information is coming up next, so read on!

35

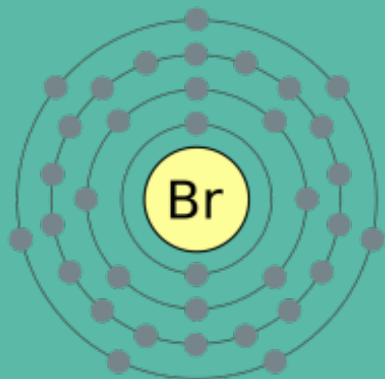
Br

Bromine

79.904

35: Bromine

2,8,18,7



The Bromine Atom

STRUCTURE

I told you before that bromine is 35. That means that bromine's atomic number, meaning how many protons are in the nucleus and how many electrons are orbiting the nucleus in shells. There are 4 shells in bromine. Since bromine is 35, there are 35 protons and 35 electrons. The neutrons is the atomic mass minus the atomic number. Bromine has 45 neutrons.

Bromine is grouped on the periodic table according to what it's made of. Bromine is in the halogens group, which is reactive nonmetallic elements.

At room temperature bromine is in liquid form. It can be frozen to become a solid, and it does emit gas at room temperature, although it doesn't turn fully into a gas.

Physical properties of bromine are these things. Bromine will melt and at 19.04°F and will boil at the temperature of 137.8°F. It's density is 3.12g/cm cubed.

A few chemical properties of bromine are these.

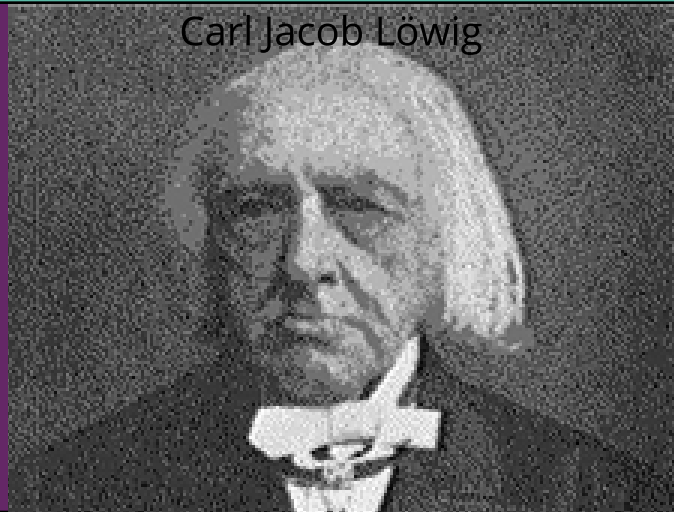
Discovery

Believe it or not, there were actually two discoverers of bromine! Carl Jacob Löwig, a French chemist, and Antoine Jérôme Balard, a German chemist, both discovered bromine. Bromine was first discovered in 1826 by these two chemists. The word bromine comes from the Greek word bromos, which means stench. This is because bromine lets off a foul smell that can burn sin and irritate breathing.

Antoine Jérôme Balard



Carl Jacob Löwig



Compounds, Hazards, and uses

There are many uses of bromine. One use of bromine is for flame proof plastics. These flame proof plastics are in televisions, computers, mobile phones, and mattresses. Bromine is also used to purify water for pools and other things. Bromine agents are used in photography, which gets the sufficient light levels in the photograph.

Liquid bromine has a chance to cause fire and explosion with other elements, usually metals. If bromine is inhaled it will cause cough, sore throat, short breath, dizziness, headache, and wheezing. Bromine on the skin will causes rashes, pain, and serious skin burns. Bromine is a pretty dangerous element.

Bromine has so many compounds I don't know if they will fit. Let's just see. They are Dibromine Monoxide (Br_2O), Bromine Gas (Br_2), Bromine Pentachloride (BrCl_5), Tribromine Octoxide (Br_3O_8), Bromine Trifluoride (BrF_3), Bromine Pentafluoride (BrF_5), Bromine Chloride (BrCl), and Sulfur Dibromide (SBr_2). That's at least 8 compounds.



Fun facts

- Bromine is more rare than three quarters of the elements that make up the earth's crust.
- Bromine is the only nonmetallic element that is liquid at room temperature.
- Bromine is one of the corrosive elements. That means that it will erode, or break things down, including skin. Ouch!
- Bromine reacts very vigorously with aluminum and other metals.

