

The element argon essay sample

[Science](#), [Chemistry](#)



Argon was originally named after the Greek word “ Argos,” meaning inactive. Argon’s chemical symbol was just A before it was changed to Ar in 1957. It has an atomic number of 18, and is in Period 3, Group 18. Argon contains 18 protons and 18 electrons with 22 neutrons. It has an atomic mass of 39. 948. Suspected to be present in the atmosphere in 1785 by Henry Cavendish, Argon wasn’t actually discovered until 1894 by William Ramsay, a Scottish chemist, and Lord Rayleigh, an English chemist. Argon makes up about 0. 93% of the Earth’s atmosphere. It is a byproduct of the product of nitrogen and oxygen. Per year, it is commercially produced around 700, 000 tons globally. Argon is a colorless, odorless, tasteless noble gas. Although it is colorless, argon gas does produce a pale blue-violet light when a little mercury is added. It has a melting point of 83. 30 K (-189. 35 C or -308. 83 F) and a boiling point of 87. 30 K (-185. 85 C or -302. 53 F). Even though argon isn’t toxic, it still can be harmful if it enters the body. If inhaled, it can cause dizziness, dullness, headache, and suffocation. If it enters through the skin and it comes in contact with liquid, it can cause frostbite.

If it gets in the eyes and it comes in contact with liquid, it can also cause frostbite. The gas is an asphyxiant, due to it not supplying the body with oxygen, and can cause suffocation. Air is 25% less dense than argon, so it is considered very dangerous in sealed spaces. In closed areas, it was found to cause death because of it being an asphyxiant. An example of this situation would be an event in 1994, where a man was asphyxiated. He entered an argon filled section of oil pipe under construction in Alaska. Since argon is colorless, odorless, and tasteless, he had no idea that he walked into his demise. The incident exhibits the risks of argon tank leakage in confined

spaces, and stresses the need for proper use, storage and handling to keep people safe. Argon is not heard often in our daily lives, but surprisingly it has many uses. It is used in lighting, like electronic light bulbs, florescent tubes, and radio vacuum tubes. It protects the filaments of the bulb. One of argon's most interesting uses is being the gas to fill the tires and air bags of cars. It is used as a gas shield when workers are welding. Argon can be used during certain surgeries like argon laser surgery, which is for eye surgery and superficial skin diseases, and cryosurgery procedures.

It is a protective atmosphere when scientists are growing silicon and germanium crystals. Argon inflates dry suits for technical SCUBA divers. The gas fills the space between the panes of glass. In winemaking, argon is used and displaces oxygen in barrels to prevent vinegar formation. It also offers a safe atmosphere for past documents and averts ruin in storage and while out in display. Pure argon is worth \$0.50 for 100g. Even though it may not be as important as oxygen and carbon, argon does have a purpose in our atmosphere by being a non-reactive gas. The most important fact about argon is that it is used where a completely non-reactive gas is needed. The most interesting fact about Argon is probably that it is the most abundant and least expensive, truly inert gas. An important safety fact is even though Argon is non-toxic, it must be used, stored, and handled properly, especially when dealing with sealed or enclosed spaces.

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