Medical Oxygen Gas Plant. Oxygen Bottling Plant. Oxygen Cylinder Filling Plant. Industrial Oxygen Gas Filling Plant. Manufacture of Industrial Gases.

Description:

Oxygen is an element that can be a solid, liquid or gas depending on its temperature and pressure. In the atmosphere it is found as a gas, more specifically, a diatomic gas. This means that two oxygen atoms are connected together in a covalent double bond. Both oxygen atoms and oxygen gas are reactive substances that are essential for life on Earth.

Oxygen is a gas. It is a colorless, tasteless, odourless gaseous element that constitutes 21% of the atmosphere and is found in water, in most rocks and minerals, and in numerous organic compounds, that is capable of combining with all elements except the inert gases, that is active in physiological processes, and that is involved especially in combustion processes.

Oxygen gas, also called dioxygen because it is a bond of two oxygen atoms, is the second-most abundant element in the Earth's atmosphere, accounting for 21 percent of the air we breathe, well behind nitrogen's 78 percent. Pure oxygen gas has a specific gravity of 1.105.

Usage in the Industry

The greatest commercial use of oxygen gas is in the steel industry. Large quantities are also used in the manufacture of a wide range of chemicals including nitric acid and hydrogen peroxide. It is also used to make epoxyethane (ethylene oxide), used as antifreeze and to make polyester, and chloroethene, the precursor to PVC.

Oxygen gas is used for oxy-acetylene welding and cutting of metals. A growing use is in the treatment of sewage and of effluent from industry.

This gas is used in various industrial chemical applications. It is used to make acids, sulfuric acid, nitric acid and other compounds. Its most reactive variant is ozone O3. It is applied in assorted chemical reactions. The goal is to boost reaction rate and oxidation of unwanted compounds. Hot oxygen air is required to make steel and iron in blast furnaces. Some mining companies use it to destroy rocks.

Oxygen is used to cut metals. Oxygen not only helps in burning but is a very reactive gas. These two properties make it an effective tool for cutting metals at high temperatures through the process of oxidation.

Use in Medicine and Health

In healthcare institutions like hospitals, oxygen supplies are kept in stock. These are provided to patients who have difficulty breathing. This breathing apparatus is also used by astronauts walking in space, scuba divers and mountaineers. Oxygen gas is used to destroy bacteria. The same oxygen gas is used to treat victims of carbon monoxide poisoning.

Oxygen is efficient at killing bacteria and is, therefore, commonly used for cleansing the body from harmful bacteria. In general, deep breathing increases the amount of oxygen in the body. In certain situations, one can use liquid oxygen as well for therapeutic purposes.

In many places where there is a danger of oxygen deficiency in the air, emergency oxygen supplies are provided in the form of oxygen tanks. For example, in airplanes, emergency oxygen is always available, because at higher altitudes, the oxygen level falls to very low values. Similarly, in submarines, the availability of emergency oxygen kits is a must.

For more details download PDF file.

Keywords: Production of Oxygen Gas, How Oxygen is Made, Producing Oxygen Gas, Oxygen Plant, Industrial Oxygen Plant, Industrial Gases, Making of Oxygen Gas, Oxygen Production, Manufacturing Process of Oxygen Gas Plant, Oxygen Plant Manufacturing Process, Oxygen Plant in India, Oxygen Gas Production Plant, Oxygen Gas Manufacturing Plant, Manufacturing of Oxygen Gas, Project Report on Oxygen Gas Plant, Oxygen Gas Manufacture in India, Manufacturing of Medical Gases, Oxygen Gas Manufacturing Unit, Filling So

Created At: 20 Nov, 2017