

Electrolysis is the process of converting water ( $\text{H}_2\text{O}$ ) into hydrogen ( $\text{H}^+$ ) and hydroxide ( $\text{OH}^-$ ) ions by introducing an electric current into it. As the ions migrate to the opposing electrodes, pure gases of oxygen ( $\text{O}_2$ ) and hydrogen ( $\text{H}_2$ ) are released. These electrolytes include sodium nitrate salt ( $\text{NaNO}_3$ ) and sulfuric acid ( $\text{H}_2\text{SO}_4$ ).