Sulfuric Acid, also known as Oil of Vitriol to medieval European alchemists, is a colourless, greasy, dence and also corrosive liquid, that has the chemical formula of H₂SO₄. It is arguably one of the most important chemicals, that can be used for important things that benefit society to many extents. It can be prepared industrially, with the reaction of water and sulfur trioxide, which can be made by reacting sulfur dioxide and oxygen by using either a chamber process or a contact process. It is produced in a larger scale due to it’s beneficial contribution to the production of fertilizers, dyes, pigments, drugs, detergents, explosives as well as inorganic salts. It is always soluble in water in all concentrations.

How have scientists managed, to a feasible extent, managed to produce Sulfuric Acid on a larger scale safely without causing excess environmental damage ? Furthermore, how what have the social, economic and political impacts been regarding the production of Sulfuric Acid ?

In this essay, i will talk about how Sulfuric Acid is produced on a large scale, and how it’s feasible production grant it such success in the industry. Furthermore, I will also explore the effects and impacts the production of Sulfuric Acid has on a Economic, political, social and ethical basis.

How is Sulfuric Acid made ?

In my introduction, I wrote that sulfuric acid can be produced either through the chamber process or the contact process. Here, I will be explaining and describing how sulfuric acid can be produced using the contact process. The raw materials needed in order to produce sulfuric acid are air, water and sulfur. The contact process, that is needed in order to produce the liquid, is a process that involves a reversible reaction i.e. a chemical reaction that can go both ways.

1 ) As a first step in the production of sulfuric acid, sulfur is burned, in order to produce the chemical compound Sulfur Dioxide.

(l) means liquid and (g) means gas

This, not yet is a reversible reaction. During this process, be sure not to release any sulfur dioxide, as this can contribute to acid rain, rain that contains dissolved acidic gases such as nitrogen oxides and sulfur dioxide.

2) As a second step in the production of Sulfuric Acid, more oxygen has to be reacted with Sulfur Dioxide in order to create sulfur trioxide.