

Properties and Production of Aluminium Hydroxide

Osman Adiguzel*

Department of Pharmaceuticals, Ankara University of Pharmaceuticals, Ankara Turkey

Description

Aluminium hydroxide is an inorganic salt which is also used as an antacid. It is a main component that neutralizes hydrochloric acid in gastric secretions. Gradual increase in pH may decrease and inhibit the action of pepsin. It deactivates excess acid present in the stomach associated with indigestion. It also helps to prevent the lining of your stomach from the problem of acid irritation. Aluminium hydroxide can also help in reduce the volume of phosphate in your body by which it absorbs from the food you eat. Toxic effects of aluminium hydroxide to the body is osteomalacia, Seizures, encephalopathy. It was mainly used in the patients of dialysis. By using Aluminium hydroxide for long time we may face some side effects like constipation, loss of appetite, severe stomach pain, Muscle weakness, Tiredness, Extreme drowsiness. Aluminium hydroxide is probably safe when used occasionally at the recommended dosage. Aluminium hydroxide is mainly used in medicines such as Amphojel, Alu-Tab, Alu-Cap, Mylanta, Maalox, Gelusil.

Properties and production

The appearance of Aluminium hydroxide is white powder with Density of 2.42 g/cm³. Melting Point of the Aluminium hydroxide is 300°C with Monoisotopic Mass 77.989757. Aluminium Hydroxide is a extremely water insoluble crystalline contains Aluminum source which is used for compatible with higher (basic) pH environments. Aluminium Hydroxide has different properties and uses, from base catalysis to detection of carbon dioxide. The chemical Formula of Aluminium hydroxide is H_3AlO_3 . Aluminium hydroxide is also known as Aluminic acid or Aluminic hydroxide or Aluminium (III) hydroxide.

Aluminium hydroxide is synthesized by the Bayer process. It is manufactured by dissolving bauxite in sodium hydroxide solution at

a high temperature range up to 271°C. After this process the waste is removed and the sodium aluminate solution is permitted to precipitate. The final precipitate that was obtained is known as Aluminium Hydroxide. The process from which aluminium oxide is obtained from aluminium hydroxide is known as calcination. Long contact to Aluminium (III) hydroxide may leads to irritation in eyes, respiratory system, and skin. When comes in exchange with water it causes a venomous explosion. The main uses of Aluminium hydroxide is in the manufacturing of glass, Preparation of waterproofing fabrics, Used in glass additive to increase resistance to thermal shock, as a filler in cosmetics, and in manufacture of aluminium Hydroxide gel. Aluminium hydroxide is mainly used as a flame retardant in manufacture plastics. Aluminic hydroxide has a characteristic structure of metal hydroxide comprising of hydrogen bonds.

Before taking this medicine consult Doctor or physician weather it is safe for use or not if you have drinking of alcohol frequently, severe constipation, kidney disease, and if you are dehydrated. Aluminum hydroxide is usually taken between meals or at bedtime with a full glass (8 ounces) of water. Do not consume aluminum hydroxide for more than 2 weeks without your doctor's consultation. Overdose symptoms may include severe constipation, weight loss, confusion, mood changes, or urinating less than usual or not at all. Avoid taking other medications within 2 hours before or 2 hours after you take aluminum hydroxide

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*Address for Correspondence: Dr. Osman Adiguzel, Department of Pharmaceuticals, Ankara University Faculty of Pharmaceuticals, Ankara Turkey; E-mail: madiosm@uab.edu

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