

Question1.

Write down the observation in the table given below, when 1mL Barium chloride solution is added to the solutions given in the table.

No.	Solution	By adding BaCl ₂ solution	When dilute HCl is added to this
1	MgSO ₄
2.	ZnSO ₄

Table 5.4

No.	Solution	By adding BaCh solution	When dilute HCl is added to this
1.	MgSO ₄	Barium sulfate (BaSO ₄) formed. A white precipitate.	Insoluble in dil HCl. Precipitate not disappear.
2.	ZnSO ₄	Barium sulfate (BaSO ₄) formed. A white precipitate.	Insoluble in dil HCl. Precipitate not disappear.

Question 2.

It is often said that the production of sulphuric acid is a bench mark of the industrial development of a country. Prepare a note based on the various uses of sulphuric acid.

Answer:

Sulphuric acid is an important industrial chemical which is used in the manufacturing processes of many goods over a wide range of applications. Sulfuric acid used in pulp and paper industry for chlorine dioxide generation, tall oil splitting and pH-adjustments. Sulfuric acid is a strongly acidic, oily liquid that may be clear to cloudy in appearance.

Concentrated sulfuric acid acts as both an oxidizing and dehydrating agent.

Sulfuric acid was once known as oil of vitriol. Here are some of the growing number of end-users and applications using sulfuric acid is Agricultural chemicals Aluminum Sulfate, Batteries, Cellophane, Detergents, Explosives, Fertilizers, Gasoline, Herbicides, Iron and steel pickling, Jet Fuel, Kerosene, Leather, Lubricating Oils, Medicinal processes, Oil additives, Paper, Rayon and rubber, Sugar, Synthetic fibers, Veterinary drugs, Water softener regeneration, Water treatment, Yellow pigments.