

Phosphoric Acid

October 27, 2025 • vajiramandravi.com

A clear glass bottle of Phosphoric Acid. The bottle has a wide body and a narrower neck, topped with a stopper. A white rectangular label is affixed to the front of the bottle, featuring the text "Phosphoric Acid" in a black, serif font. The bottle is partially filled with a clear, colorless liquid. The background is a neutral, light gray.

Phosphoric Acid

About Phosphoric Acid:

- It is a non-combustible, **colorless, odorless** phosphorus-containing inorganic acid.
- Phosphoric acid is not directly found in nature. It can be **obtained from phosphate rock** deposits.
- **Uses**
 - It is used to **make phosphate salts** for fertilizers.
 - It is also used in dental cements, in the preparation of albumin derivatives, and in the sugar and textile industries.
 - It serves as an acidic, fruitlike flavouring in food products.
 - It is also used in **lithium-iron-phosphate (LFP) batteries**.
 - It is used in the manufacture of superphosphate fertilisers, livestock feeds, phosphate salts, polyphosphates, **soaps, waxes, polishes and detergents**.
- It is an irritant or **corrosive** to the skin, eyes, and other mucous membranes.
- **India imports** phosphoric acid mainly from **Jordan, Morocco, Senegal, and Tunisia**.

Key facts about Phosphate Rock

- It is the natural source of phosphorus, an element that provides nutrients to plants for their growth and development.
- **How is phosphate formed?** It is a **sedimentary rock** formed millions of years ago by the accumulation of organic matter on the ocean floor.
- Its reserves are found in **Africa, North America, Kazakhstan**, the Middle East and Oceania.
- The world's largest deposits are located in Morocco, which is also one of the global leaders in phosphate extraction.
- **Phosphorus in India:** Phosphate rocks are majorly produced only from two States in India, namely Rajasthan and Madhya Pradesh.

Q1: What are Sedimentary rocks?

These are formed from the accumulation and lithification (compaction and cementation) of sediments. Sediments are small particles of rocks, minerals, organic matter, or shells that are eroded and transported by water, wind, ice, or gravity.

Source: After 'food vs fuel', a looming 'food vs cars' dilemma

Source: <https://vajiramandravi.com/current-affairs/phosphoric-acid/>

© Vajiram & Ravi. For personal use only.