

## **IS 17439:2020 Polyphosphoric acid – Specification**

Polyphosphoric acid (PPA) is prepared by condensation of orthophosphoric acid molecules ( $\text{H}_3\text{PO}_4$ ). PPA is commercially produced either by wet process, for short chains or by dry process, for more than 10 repeated units.

PPA is odourless, colourless, highly viscous liquid with deliquescent nature. It is non-oxidizing agent with powerful dehydration properties and moderate acidity. Therefore, it is extensively used as a catalyst in synthesizing aromatics and as an adsorbent of ammonia in pharmaceutical, chemical and leather industries; It can substitute orthophosphoric acid.

The standard for PPA is published in 2020. It prescribes the requirements for technical and reagent grades of PPA; related methods of sampling and testing. The requirements include relative density, percentage of  $\text{H}_3\text{PO}_4$  and  $\text{P}_2\text{O}_5$ , and other chemicals, which affect the quality of PPA required for its intended use.

Packing and marking are crucial for PPA, due to its corrosive nature and are clearly addressed in the standard.