

## IS 2080: 2021

### Stabilized Hydrogen Peroxide

**Hydrogen peroxide** is a colorless liquid at room temperature with bitter taste. It is naturally occurring substance, produced by both plant and animal cells and small amounts of gaseous hydrogen peroxide occur naturally in the air. Hydrogen peroxide has been widely used as a **powerful cleaner, bleaching agent and disinfectant**. Hydrogen peroxide is unstable, especially when exposed to light, heat, or impurities, so stabilizers are added to extend its shelf life, maintain its effectiveness and to make it suitable for a variety of industrial, medical and commercial applications. **Stabilized Hydrogen Peroxide** is a modified version of hydrogen peroxide that has been treated with stabilizing agents to prevent its natural decomposition into water and oxygen.

Stabilized hydrogen peroxide is widely used in **water treatment**, where it helps **disinfect and purify** water by eliminating contaminants like bacteria and viruses. It is also a powerful **surface disinfectant** in sectors such as **healthcare** and **food processing**. Additionally, it plays a crucial role in numerous industrial applications, including pulp and paper mills, textile manufacturing, the electronics industry, plastic and rubber industry, chemical processing, automotive manufacturing, paint and coatings industry.

To ensure stabilized hydrogen peroxide is safe and reliable, **IS 2080:2021** was first published in 1962 and updated in 1980 and 2021 to incorporate requirements to address the specific needs of chemical, electronics, paper, textiles and cosmetic industries as well as to address technical advancements that have taken place since the publication of this standard. The updated standards include **limits for residue on ignition, harmful substances** like **lead** and **arsenic** besides introduction of new grade of hydrogen peroxide, offering more options for manufacturers.

The latest revisions also implement **advanced testing methods** to accurately measure **peroxide strength** and **detect heavy metals**, ensuring **high-quality products** that are safe and effective for modern industrial and consumer needs.