



IS 11673 (Part 1) : 2019

Sodium Hypochlorite Solution – Household and Industrial Use

Be it textile and paper bleaching, laundry trade, **sterilization** of swimming pools, **disinfection** of drinking water, treatment of cyanide wastes of electroplating industry and treatment of sewage effluent, Sodium Hypochlorite solution is widely used. Industries also use it as a **sanitizer** and deodorizer for floors, sinks and toilets, as a therapeutic adjunct in the treatment of certain skin diseases and as a safe **antiseptic**. While we buy sodium hypochlorite solution, we expect it to be of better quality.

Indian Standard, IS **11673 (Part 1)**, specifies quality requirements for the **Sodium Hypochlorite solution**, including methods of sampling and tests. This standard aims to ensure uniformity and safety by setting clear guidelines for the properties and testing of sodium hypochlorite solution.

Classified into two grades i.e. **Grade 1 – for household use** and **Grade 2 – for industrial use**, the Indian Standard compliance sets requirements for relative density, available chlorine, total chlorine, free alkali, free sodium carbonate, iron, sodium chlorate, keeping quality, all of which ensures quality product for end user.

Packaging clause mentions requirements for containers used which shall be dry and free from grease, dirt or other foreign matter likely to cause decomposition of the material. The Indian Standard also mandates **marking** of a) Name and grade of the material; b) Indication of the source of manufacture; c) Gross and net mass; d) Date of packing; e) Lot number; f) Available chlorine (to be declared by the manufacturer); and g) A notice in bold should be clearly marked indicating – “NOT SUITABLE FOR TREATMENT OF WATER MEANT FOR POTABLE PURPOSE”.

In summary, Indian Standard for sodium hypochlorite solution ensure public health safety, product reliability, environmental responsibility, and support for regulatory compliance. These benefits make the product safer and more effective for both industrial and public health applications.