

## **IS 646:2020 Liquid Chlorine - Technical - Specification (third revision)**

This Standard prescribes the requirements and the methods of sampling and testing for technical-grade liquid chlorine, used in the bleaching of pulp and textiles, water sterilization, and manufacture of chemicals.

Although the technical-grade chlorine is packed and sold as a liquid, it is usually used as a gas. In India, Chlorine is deemed to be an explosive, when contained in any metal container, in a compressed or liquefied state as per the Indian Explosives Act 1984. The filling, possession, transport and importation are governed by Gas Cylinder Rules, 2016.

### *Key elements of the Standard:*

i. Composition: The Standard specifies the requirements and tests for the following:

- a. Chlorine in vaporized state
- b. Moisture
- c. Mercury
- d. Arsenic
- e. Lead

ii. Packing and Marking: The Standard specifies that the Chlorine shall be supplied in the liquefied condition in suitable cylinders or other containers whose capacity shall be subject to agreement between the purchaser and the supplier. The Standard also refers to the Gas Cylinder Rules 2016 for the compliance of the cylinders and containers.

IS 646 ensures the safe, efficient, and environmentally responsible use of Liquid Chlorine-technical grade. It covers key aspects such as properties, packaging, and quality control ensuring that industries using liquid chlorine adhere to high standards of safety and regulatory compliance.