

Indian Standard IS 2124: 2000 Sodium Bicarbonate - Specification

Sodium bicarbonate is used as baking powder, reagent in analytical chemistry; in the manufacture of effervescent salts and beverages. It also finds use in artificial mineral waters, gold and platinum plating, tanning industry, treating wool and silk, fire extinguishers and ceramics.

For food and pharmaceutical applications, it is essential that the product is free from harmful impurities, such as heavy metals and arsenic, to ensure safety. In industrial applications, consistency in particle size, solubility, and chemical stability is crucial for performance.

Indian Standard **IS 2124: 2000** defines the quality and safety requirements for **sodium bicarbonate**, a versatile compound used in food, pharmaceuticals, and various industrial processes.

The standard specifies three grades of sodium bicarbonate: **Pure, Analytical Reagent,** and **Refined**. Each grade meets different needs, from fine chemical and pharmaceutical uses to laboratory reagents and food-grade applications. The standard mandates rigorous testing for **total alkalinity** to ensure the material is effective in its function. It also sets strict limits on impurities like **chlorides, sulphates**, and heavy metals, which are particularly important for food and pharmaceutical safety. The standard further ensures that the product dissolves easily in water and is free from insoluble matter, guaranteeing high performance in all applications.

For refined grades, the standard includes provisions for **Eco Mark** labelling, signifying that the product meets environmental safety requirements. Sodium bicarbonate complying with IS 2124: 2000 carry the **BIS mark**, assuring consumers that the product has been tested for quality and safety. By following the requirements given in the standard, manufacturers can produce sodium bicarbonate that is safe, effective, and environmentally friendly, providing consumers with a reliable product for both industrial and household use.