Sodium Bicarbonate
Baking Soda
NaHCO₃  Mol wt 84.01

DESCRIPTION
A white crystalline powder. It is stable in dry air, but slowly decomposes in moist air. Its solutions, when freshly prepared with cold water without shaking, are alkaline to litmus. The alkalinity increases as the solutions stand, are agitated, or are heated. One g dissolves in 10 ml of water. It is insoluble in alcohol.

REQUIREMENTS
Identification
A 1 in 10 solution gives positive tests for Sodium, page 517, and for Bicarbonate, page 516.

Assay  Not less than 99.0% of NaHCO₃ after drying.
Ammonia  Passes test.
Arsenic (as As)  Not more than 3 ppm.
Heavy Metals (as Pb)  Not more than 5 ppm.
Insoluble Substances  Passes test.
Loss on Drying  Not more than 0.25%.

TESTS
Assay  Weigh accurately about 3 g, previously dried over silica gel for 4 h, dissolve it in 25 ml of water, add methyl orange TS, and titrate with 1 N sulfuric acid. Each ml of 1 N sulfuric acid is equivalent to 84.01 mg of NaHCO₃.