

Identification test of sodium bicarbonate

BACKGROUND-

Sodium carbonate is a white alkaline powder popularly known as baking soda and is very much similar to sodium bicarbonate which is used as cleansing agent. The main test for the presence of carbonate salts is based upon the reaction of dilute acid solution with the substance which leads to release of bubbles of the gas carbon dioxide.

The identification tests are prescribed by pharmacopoeias to check the quality of the drugs, pharmaceutical aids or any reagents required for the test. The principles of these tests are based upon the reactions of ions or radicals with a specific inorganic or organic reagent. Single compound or a mixture of compounds can undergo these tests.

Aim of the experiment- To do the identification test of sodium bicarbonate.

REQUIREMENTS-

Sample: Sodium bicarbonate

Chemicals: Distilled water,
Potassium carbonate (15% w/v),
Potassium antimonate

Apparatus: Test tube,
Test tube holder, Spatula.

PROCEDURE-

Substances containing sodium ion of which 100mg was to be dissolved in 2ml of water to which 2ml of 15% w/v solution of potassium carbonate was added and heated to boil. To the boiled solution freshly prepared potassium antimonate solution was added and again set to boil. Then the solution was cooled in ice water and the inside of the test tube was rubbed.

CONCLUSION-

From the above experiment it can be concluded that sodium ion is present in the substance and results in formation either no precipitate or white precipitate and depending upon the solvent sometimes impart yellow colour, if the substances undergoes treatment with acid which proves for the presence of sodium ion.

REFERENCES-

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