

## PHARMACEUTICAL CHEMISTRY

### EXPERIMENT NO -15

**OBJECT:** To perform the identification test of sodium bicarbonate.

#### REFERENCE

3. Singh H.R., Kapoor V.K. "Practical Pharmaceutical chemistry", Vallabh Prakashan, Ed 1<sup>st</sup>, 2008, pp 19-20.
4. Chatwal GR, "Pharmaceutical chemistry inorganic" Himalaya publishing house, Ed 5<sup>th</sup>, 2010, pp 256-257

#### REQUIREMENTS

**Chemical required:** Sodium bicarbonate, Potassium carbonate, potassium antimonite solution, acetic acid, magnesium uranyl acetate solution, nitric acid, silver nitrate solution, dilute ammonia solution, potassium dichromate, sulphuric acid, etc

**Apparatus required:** Volumetric flask, conical flask, Burette, Pipette, Glass rod.

#### THEORY

Any process that can provide a qualitative determination of the ions present in a simple inorganic compound is based upon knowledge of acid/base chemistry, redox chemistry, and solubility. In this regard, the identification of a single pure compound is therefore very much simpler than the identification of a mixture. This experiment deals only with the identification of simple compounds, ie those that contain only one cation and one anion.

#### PROCEDURE

##### REACTIONS OF SODIUM IONS

S.NO	TEST	OBSERVATION	INFERENCE
1	Take 2 ml of the test solution, add 2 ml of 15% solution of potassium carbonate. Heat to boiling. Add 4 ml of potassium antimonite solution. Heat to boiling. Cool in ice.		
2	To 2 ml of the test, solution add 0.5 ml of 1 M acetic acid followed by a large excess of magnesium uranyl acetate solution.		

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### REACTION OF BICARBONATES

S. NO	TEST	OBSERVATION	INFERENCE
1	Boil the aqueous solution of the sample.		
2	To the aqueous solution of the sample add magnesium sulphate		

#### RESULT:

An identification test of sodium bicarbonate was performed.