EXPERIMENT NO -15

OBJECT: To perform the identification test of magnesium sulphate.

REFERENCE

1. Singh H.R., Kapoor V.K. "Practical Pharmaceutical chemistry", Vallabh Prakashan, Ed Ist, 2008, pp 19-20.
2. Chatwal GR, "Pharmaceutical chemistry inorganic" Himalaya publishing house, Ed 5th, 2010, pp 256-257

REQUIREMENTS

Chemical required: Magnesium sulphate, 2 M ammonium chloride, 0.25 M disodium hydrogen phosphate, dilute ammonia solution lead acetate solution, ammonium acetate solution, potassium dichromate, dilute hydrochloric 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 MAGNESIUM IONS

S.NO	TEST	OBSERVATION	INFERENCE
1	Dissolve 15 mg of sample in 2 ml of water. Add 1 ml of dilute ammonia solution.		
2	Add 1ml of 2 M solution of Ammonium chloride.		

REACTION 0F SULPHATE

S. NO	TEST	OBSERVATION	INFERENCE
1	Dissolve 50mg of sample in 5 ml of water. Acidify with dilute hydrochloric acid. And 1 ml of barium chloride.		
2	Dissolve 50 mg sample with 5 ml of water. Add 2 ml of lead acetate solution. Divide into two parts. • To the first part add ammonium acetate solution. • To the second part add sodium hydroxide solution.		

RESULT:

An identification test of magnesium sulphate was performed.