Date 10/05/2022

Expt. No. 09 Page No. 24

Aim:-

To perform the chemical assay of Ammonium chloride.

Reference:

Requirement:

a) Glassware:- Conical flask, beaker, burette, measuring cylinder, funnel, glass rod, dropper etc.

b) Chemical:-
- Ammonium Chloride (0.1g)
- NaOH (0.1 N)
- Neutralized formaldehyde solution
- Phenolphthalein (0.5%) as indicator.

Theory:

Ammonium chloride is a white crystalline salt used chiefly in dry cells, as a mordant, and as soldering flux. Solutions of ammonium chloride are mildly acidic.

Teacher's Signature _____

Observation and calculation:

S. No.	Starting point	End point	Volume consumed
1.	0	2.2	2.2
2.	2.2	5.2	3.0
3.	5.2	7.7	2.5

Avg. Vol. consumed $= \frac{2.2 + 3.0 + 2.5}{3} = \frac{7.7}{3} = 2.56 \text{ ml}$

Date

Expt. No. 09

Page No. 25

Procedure:

→ For sample solution.

→ Take a clean beaker and add 20 ml of distilled water and then add 5 ml of Formaldehyde and then add 0.1 g NH_4Cl.

→ For Standard solution

→ Take a clean beaker and add 50 ml of water and then add 0.2 g NaOH and mix it. After mixing put it into burette.

→ Take 5 ml of sample sol^n in conical flask and 2-3 drops of phenolphthalein indicator and titrate it against NaOH.

Result:

The chemical assay of ammonium chloride was performed successfully in the laboratory.

Teacher's Signature