

Aim :-

Determination of Potassium iodide.

Reference :-Selected experiment of Pharmaceutical analysis - I  
by A Siddique. Page no - 91.Requirement :-

- 1) Chemicals  $\Rightarrow$  0.05M  $KIO_3$  solution, HCl, Chloroform.
2. Glassware  $\Rightarrow$  Conical flask, Beaker, Measuring cylinder, burette, spatula and weigh balance.

Theory :-

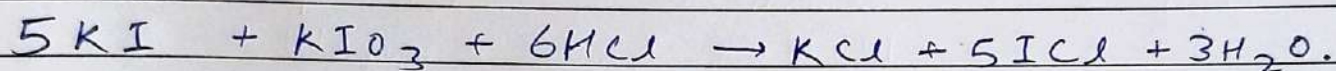
Potassium iodide occurs as colourless or white crystals as a white crystalline powder. It is very soluble in water, soluble in ethanol and practically insoluble in diethyl ether. It is slightly deliquescent in moist air.

Teacher's Signature \_\_\_\_\_



### Experimental Overview

Potassium iodide contains not less than 99% w/w of calculated with reference to the dried substance potassium iodide oxidizes quantitatively iodides into iodine.



The liberated iodine reacts with excess of ~~iodine~~ in iodate in presence of strong HCl to Iodine mono chloride.



### Procedure :-

1. Weigh accurately about 0.5g of potassium iodide dissolve in 10 ml of water and add 25 ml HCl and 5 ml of chloroform.
2. Titrate it with 0.05M Potassium iodate until purple colour disappear from the chloroform layer.

### Result :-

The percentage (%) purity of KI .....