

Aim :→

To detect the presence of extra element nitrogen in the given sample. (urea).

Reference :→

Dr. Jain K.S. Dr. Miniyal, P.B "A Practical book of pharmaceutical organic chemistry, Nirali Pub.

Requirement :→

- (a) Glassware :→ Beaker, test tube holder, glass rod.
- (b) Chemical :→ Urea, water.

Theory :→

The behaviour of the compound towards various solvent like water. Dilute caustic soda, dilute HCl and conc.  $H_2SO_4$  also reveals its nature. Take 0.1g or 0.2 ml (2-5) drop of the substance and try to dissolve in 3 ml of the solvent and its solubility.

### Observation Table.

S.No.	Experiment	Observation
1.	Physical state	Solid
2.	Colour	White
3.	Odour	Odourless
4.	Solubility test	

1.	Sample + Cold water	Partially dissolved
2.	" + Hot "	easily "
3.	" + Conc. $H_2SO_4$	Partially "
4.	" + hot conc. $H_2SO_4$	easily "





Procedure :-

- i) Take a clean and dried test tube and beaker.
- ii) After that ~~a~~ 19 gm urea put in each test tube accurately.
- iii) Now heated water in beaker with the help of a heating mantle.
- iv) After that we put 3 ml hot water with pipette in one ~~that~~ test tube and mark up test tube as it is with hot water.
- v) After observing first reaction we done 2<sup>nd</sup> with 3 ml cold water it one gram of urea and mark that as cold one and observe it.

Result :-

The given sample of urea was observed in different sample successfully.