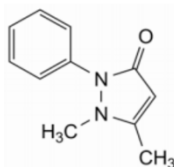


NAME: ALICIA VALLS ARRUFAT

SAMPLE: PHENAZONE



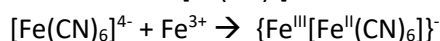
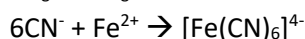
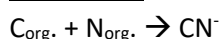
BEHAVIOUR OF COMPOUND DURING HEATING AND BURNING (*describe what you should see during the heating of your sample in burner and choose one of possibility*):

We should see carbonization, it will turn black; the compound will be burnt without a rest and it may possible have an increase of volume, melt, release vapours that are flammable or sublimate.

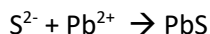
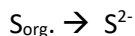
ORGANIC/INORGANIC/ORGANIC-INORGANIC COMPOUND

ELEMENTARY ANALYSIS (*write down the reactions of tests you should do and mark which of them should be positive*):

1- NITROGEN → **POSITIVE** → BLUISH – GREEN PRECIPITATE OR BLUE SOLUTION



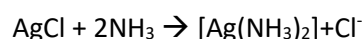
2- SULPHUR → **NEGATIVE** → NOT BLACK SOLUTION OR BLACK PRECIPITATE



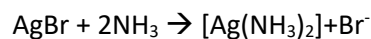
3- HALOGENS → **NEGATIVE** → NOT HEAVY, WHITE, YELLOWISH OR YELLOW PRECIPITATE OF SILVER HALIDE

4- CHLORINE, BROMIDE, IODINE → **NEGATIVE**

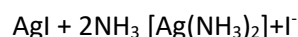
- CHLORINE → NOT WHITE PRECIPITATE EASILY SOLUBLE IN DILUTE AMMONIA



- BROMIDE → NOT YELLOWISH PRECIPITATE, WHICH IS HARDLY SOLUBLE IN DILUTE AMMONIA, BUT IT IS SOLUBLE IN CONCENTRATED AMMONIA



- IODINE → NOT YELLOW PRECIPITATE INSOLUBLE IN BOTH DILUTE AND CONCENTRATED AMMONIA



SOLUBILITY (*decide according to the information in Ph. Eur.*):

Very soluble in water, in ethanol (96 per cent) and in methylene chloride.

pH of solution/suspension (*decide according to nature of your sample*): my sample is acid.

REACTIONS FROM THE FLOWCHARTS (*write down your "flowcharts pathway"; describe results of your hypothetical analysis – reactions from the flowcharts you can find in material called "Identification of an unknown drug"*):

1. Unknown compound, organic or inorganic? Organic compound.
2. Elementary analysis. Contains C, H, O; C, H, O, N or C, H, O, N, S? Contains C, H, O, N.
3. Soluble in water or insoluble in water? Soluble in water.
4. Reaction with sodium nitrite:
We dissolve 0,05g of the compound in distilled water. After that, we take 5ml of the solution and add a few drops of dilute sulphuric acid and a crystal of sodium nitrite. The colour of the solution changes to blue- green.



5. We have had a positive reaction so we stop the process here.

IDENTIFICATION REACTIONS (*from your monography choose the tests necessary for identification of your substance and describe them*):

First identification:

- A. Melting point: from 109°C to 113°C
- B. Infrared absorption spectrophotometry.

Second identification:

- A. Melting point: from 109°C to 113°C
- C. To 1ml of the Solution S (prepared dissolving 2,5g in CO₂ free – water and diluting to 50ml with the same solvent) we have to add 4ml of water R and 0,25ml of dilute sulfuric acid R. After that we have to add 1ml of sodium nitrite solution R and a green colour will develop.
- D. To 1ml of the solution S we have to add 4ml of water R and 0,5ml of ferric chloride solution R2. A red colour develops which is discharged on the addition of dilute sulfuric acid R.