

**NAME:** JAIME VIEIRA RUIZ (F19015Z)

**SAMPLE:** Magnesium subcarbonate

**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*):

- No changes
- Melting to colourless liquid, which acquires the original colour after cooling down
- Change of the colour
- Releasing vapours
- Sublimation

**ORGANIC/INORGANIC/ORGANIC-INORGANIC COMPOUND**

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

Inorganic compound

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

Practically insoluble in water. It dissolves in dilute acids with effervescence

**pH of solution/suspension** (*decide according to nature of your sample*):

Basic

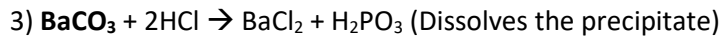
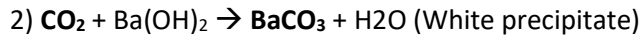
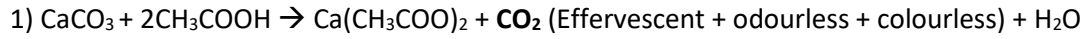
**REACTIONS FROM THE FLOWCHARTS** (*write down your "flowcharts pathway"; describe results of your hypothetical analysis – reactions from the flowcharts you can find in material called "Identification of an unknown drug"*):

**Unknown compound** → Inorganic compound → solubility in water → no → solubility in HCl → Yes → reaction with ammonium oxalate solution II → NEGATIVE → reaction with titanium yellow II → POSITIVE → Magnesium subcarbonate or magnesium peroxide

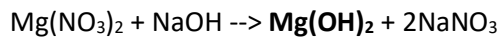
**IDENTIFICATION REACTIONS** (*from your monography choose the tests necessary for identification of your substance and describe them*):

**B)** Introduce into a test-tube 0.1 g of the substance to be examined and suspend in 2 mL of water R or use 2 mL of the prescribed solution. Add 3 mL of dilute acetic acid R. Close the tube immediately using a stopper fitted with a glass tube bent twice at right angles. The solution or the suspension becomes

*effervescent and gives off a colourless and odourless gas. Heat gently and collect the gas in 5 mL of barium hydroxide solution R. A white precipitate is formed that dissolves on addition of an excess of hydrochloric acid R1.*



**C)** *Dissolve about 15 mg in 2 mL of dilute nitric acid R and neutralise with dilute sodium hydroxide solution R. The solution gives the reaction of magnesium.*



**MAGNESIUM:** *Dissolve about 15 mg of the substance to be examined in 2 mL of water R or use 2 mL of the prescribed solution. Add 1 mL of dilute ammonia R1. A white precipitate is formed that dissolves on addition of 1 mL of ammonium chloride solution R. Add 1 mL of disodium hydrogen phosphate solution R. A white crystalline precipitate is formed.*

