Quality standards

Edition: BP 2025 (Ph. Eur. 11.6 update)

Magnesium Glycerophosphate Chewable Tablets

General Notices

Chewable Magnesium Glycerophosphate Tablets

NOTE: This monograph has been developed to cover unlicensed formulations.

Action and use

Used in the treatment of magnesium deficiency.

DEFINITION

Magnesium Glycerophosphate Chewable Tablets contain Magnesium Glycerophosphate.

The tablets comply with the requirements stated under Tablets and with the following requirements. Where appropriate, the tablets also comply with the requirements stated under Unlicensed Medicines.

Content of magnesium, Mg

95.0 to 105.0% of the stated amount.

IDENTIFICATION

- A. To a quantity of the powdered tablets containing the equivalent of about 25 mg of magnesium in a test tube fitted with a glass tube add 1 g of *potassium hydrogen sulfate*. Heat strongly and direct the white vapour towards a piece of filter paper impregnated with a freshly prepared 1% w/v solution of *sodium nitroprusside*. The filter paper develops a blue colour in contact with *piperidine*.
- B. Place a quantity of the powdered tablets containing the equivalent of about 25 mg of magnesium in a crucible and ignite. Take up the residue with 5 mL of <u>nitric acid</u>, heat on a water-bath for 1 minute and filter. The filtrate yields reaction B characteristic of <u>phosphates</u>, <u>Appendix VI</u>.
- C. Dissolve a quantity of the powdered tablets containing the equivalent of about 25 mg of magnesium in 10 mL of <u>water</u> and filter. The filtrate yields reaction A characteristic of <u>magnesium salts</u>, <u>Appendix VI</u>.

TESTS

Disintegration

The requirement for Disintegration does not apply to Chewable Magnesium Glycerophosphate Tablets.

Phosphate

Dissolve a quantity of the powdered tablets containing the equivalent of about 25 mg of magnesium in 100 mL of <u>water</u> and dilute 1 mL of the solution to 100 mL with <u>water</u>. The resulting solution complies with the <u>limit test for phosphates</u>, <u>Appendix VII</u> (0.5%).

ASSAY

https://nhathuocngocanh.com/bp/ Weigh and powder 20 tablets. Dissolve a quantity of the powder containing the equivalent of about 120 mg of magnesium in 25 mL of water. Transfer 10 mL of the solution into a 500 mL conical flask and carry out the complexometric titration of magnesium, Appendix VIII D, beginning at the words '... and dilute to 300 mL with water'. Each mL of 0.1м disodium edetate VS is equivalent to 2.431 mg of Mg.

LABELLING

The label states the quantity of active ingredient both in terms of the amount of Magnesium Glycerophosphate and in terms of the equivalent amount of magnesium or magnesium ions (Mg²⁺).

Tablets containing 1 gram of Magnesium Glycerophosphate contain approximately 97 mg of magnesium and approximately 4 millimoles of magnesium ions (4 mmol Mg²⁺) per tablet.