



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

Calcium Carbonate and Heavy Magnesium Carbonate Chewable Tablets

[General Notices](#)

Chewable Calcium Carbonate and Heavy Magnesium Carbonate Tablets

Action and use

Antacid.

DEFINITION

Calcium Carbonate and Heavy Magnesium Carbonate Chewable Tablets contain Calcium Carbonate and Heavy Magnesium Carbonate. They may be flavoured.

The tablets comply with the requirements stated under Tablets and with the following requirements.

Content of Calcium, Ca

95.0 to 105.0% of the stated amount.

Content of magnesium, Mg

95.0 to 105.0% of the stated amount.

IDENTIFICATION

- A. In the Assay, solution (1) exhibits a similar absorption to the [standard solutions](#) at 422.7 nm (calcium).
- B. In the Assay, solution (3) exhibits a similar absorption to the [standard solutions](#) at 285.2 nm (magnesium).
- C. The powdered tablets yield reaction B characteristic of *calcium salts*, [Appendix VI](#).
- D. The powdered tablets yield reaction B characteristic of *magnesium and magnesium salts*, [Appendix VI](#).
- E. The powdered tablets yield the reactions characteristic of *carbonates*, [Appendix VI](#).

TESTS

[Disintegration](#)

The requirement for Disintegration does not apply to Calcium Carbonate and Heavy Magnesium Carbonate Chewable Tablets.

ASSAY

For calcium

Weigh and powder 20 tablets. For solution (1) disperse a quantity of the powdered tablets containing the equivalent of 0.272 g of calcium in 10 mL of [6M hydrochloric acid](#), stir for 15 minutes, and add sufficient [water](#) to produce 500 mL, mix and filter. To 1 volume of the filtrate add 5 volumes of [lanthanum trioxide solution](#) and dilute to 100 volumes with [water](#).

Prepare the [standard solutions](#) using a suitable volume of [calcium standard solution \(1000 ppm Ca\)](#), add 10 mL of [6M hydrochloric acid](#), and sufficient [water](#) to produce 500 mL, mix and filter. To 1 volume of the filtrate add 5 volumes of [lanthanum trioxide solution](#) and dilute to 100 volumes with [water](#).

For solution (2) to 10 mL of [6M hydrochloric acid](#) add sufficient [water](#) to produce 500 mL, mix and filter. To 1 volume of the filtrate add 5 volumes of [lanthanum trioxide solution](#) and dilute to 100 volumes with [water](#).

Determine the total content of calcium in solution (1) by Method I for *atomic absorption spectrophotometry*, [Appendix II D](#), measuring at 422.7 nm using the [standard solutions](#) and solution (2) as the blank.

For magnesium

Weigh and powder 20 tablets. For solution (3) disperse a quantity of the powdered tablets containing the equivalent of 22 mg of magnesium in 10 mL of [6M hydrochloric acid](#), stir for 15 minutes and add sufficient [water](#) to produce 500 mL, mix and filter. To 1 volume of the filtrate add 5 volumes of [lanthanum trioxide solution](#) and dilute to 100 volumes with [water](#).

Prepare the [standard solutions](#) using a suitable volume of [magnesium standard solution \(100 ppm Mg\)](#), add 10 mL of [6M hydrochloric acid](#) and sufficient [water](#) to produce 500 mL, mix and filter. To 1 volume of the filtrate add 5 volumes of [lanthanum trioxide solution](#) and dilute to 100 volumes with [water](#).

Determine the total content of magnesium in solution (3) by Method I for *atomic absorption spectrophotometry*, [Appendix II D](#), measuring at 285.2 nm using the [standard solutions](#) and solution (2) as the blank.

STORAGE

Calcium Carbonate and Heavy Magnesium Carbonate Chewable Tablets should be protected from moisture.

LABELLING

The quantity of active ingredient is stated in terms of the equivalent amount of calcium and magnesium.