



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

Alimemazine Tablets

[General Notices](#)

Action and use

[Histamine](#) H₁ receptor antagonist; antihistamine.

DEFINITION

Alimemazine Tablets contain Alimemazine Tartrate.

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

Content of alimemazine tartrate, C₃₆H₄₄N₄S₂·C₄H₆O₆

92.5 to 107.5% of the stated amount.

IDENTIFICATION

A. To a quantity of the powdered tablets containing 40 mg of Alimemazine Tartrate add 10 mL of [water](#) and 2 mL of 1M [sodium hydroxide](#), shake and extract with 15 mL of [ether](#). Wash the ether layer with 5 mL of [water](#), dry with [anhydrous sodium sulfate](#) and evaporate the ether to dryness. Dissolve the residue in 0.4 mL of [dichloromethane](#). The [infrared absorption spectrum](#) of the resulting solution, [Appendix II A](#), is concordant with the *reference spectrum* of alimemazine ([RS 005](#)).

B. To a quantity of the powdered tablets containing 1 mg of Alimemazine Tartrate add 1 mL of a mixture of equal volumes of [formaldehyde solution](#) and [sulfuric acid](#). A purple colour is produced.

TESTS

Related substances

Comply with the test for [related substances in phenothiazines](#), [Appendix III A](#), using *mobile phase A* and applying separately to the plate 20 µL of each of the following freshly prepared solutions. For solution (1) extract a quantity of the powdered tablets containing 0.1 g of Alimemazine Tartrate with 10 mL of a mixture of 95 volumes of [methanol](#) and 5 volumes of [diethylamine](#) and filter. For solution (2) dilute 1 volume of solution (1) to 200 volumes with the same solvent mixture.

ASSAY

Carry out the following procedure protected from light. Add 150 mL of [0.1M hydrochloric acid](#) to 10 tablets, shake for 10 minutes, mix with the aid of ultrasound for 1 minute, dilute with [0.1M hydrochloric acid](#) to produce a solution containing 0.050% w/v of Alimemazine Tartrate and filter (solution A). Dilute 10 mL of solution A to 100 mL with [water](#) (solution B). To a further 10 mL of solution A add 2 mL of [peroxyacetic acid solution](#), mix, allow to stand for 5 minutes and add sufficient [water](#) to produce 100 mL (solution C). Measure the [absorbance](#) of solution C at the maximum at 342 nm, [Appendix II B](#),

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using solution B in the reference cell and measure the [*absorbance*](#) of solution B at the same wavelength using [*water*](#) in the reference cell. Repeat the procedure using a 0.05% w/v solution of [*alimemazine tartrate BPCRS*](#) in [*0.1M hydrochloric acid*](#) in place of solution A, beginning at the words 'Dilute 10 mL of solution A ...' and calculate the content of $C_{36}H_{44}N_4S_2 \cdot C_4H_6O$ using the declared content of $C_{36}H_{44}N_4S_2 \cdot C_4H_6O$ in [*alimemazine tartrate BPCRS*](#). The test is not valid if the absorbance of solution B is more than 0.10.