



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

Edrophonium Injection

[General Notices](#)

Action and use

Cholinesterase inhibitor.

DEFINITION

Edrophonium Injection is a sterile solution of Edrophonium Chloride in Water for Injections.

The injection complies with the requirements stated under Parenteral Preparations and with the following requirements.

Content of edrophonium chloride, $C_{10}H_{16}ClNO$

95.0 to 105.0% of the stated amount.

IDENTIFICATION

- A. Dilute a sufficient volume of the injection with 0.1M [sodium hydroxide](#) to give a solution containing 0.001% w/v of Edrophonium Chloride. The [light absorption](#) of the resulting solution, [Appendix II B](#), in the range 220 to 350 nm exhibits two maxima, at 240 nm and 294 nm. The [absorbances](#) at the maxima are about 1.1 and about 0.34 respectively.
- B. To a volume containing 20 mg of Edrophonium Chloride add 0.05 mL of [iron\(III\) chloride solution R1](#). A reddish violet colour is produced.
- C. Yields reaction A characteristic [of chlorides](#), [Appendix VI](#).

TESTS

Acidity

pH, 5.0 to 6.0, [Appendix V L](#).

Dimethylaminophenol

To a volume containing 50 mg of Edrophonium Chloride add 10 mL of [phosphate buffer pH 8.0](#) and extract with two 20 mL quantities of [chloroform](#). Wash the extracts successively with two 10 mL quantities of [water](#), extract with 10 mL of 0.1M [sodium hydroxide](#) and discard the chloroform. The [absorbance](#) of the resulting solution at 293 nm is not more than 0.125, [Appendix II B](#).

ASSAY

To a volume containing 50 mg of Edrophonium Chloride add sufficient [water](#) to produce 100 mL. Dilute 10 mL of this solution to 100 mL with [water](#) and measure the [absorbance](#) of the resulting solution at the maximum at 273 nm, [Appendix](#)

II.B. Calculate the content of $C_{10}H_{16}ClNO$ taking 110 as the value of A (1%, 1 cm) at the maximum at 273 nm.

STORAGE

Edrophonium Injection should be protected from light.