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

Potassium Citrate Mixture

General Notices

Potassium Citrate Oral Solution

DEFINITION

Potassium Citrate Mixture is an *oral solution* containing 30% w/v of Potassium Citrate and 5% w/v of Citric Acid Monohydrate in a suitable vehicle with a lemon flavour. It is intended to be diluted with water before use.

The mixture complies with the requirements stated under Oral Liquids and with the following requirements.

Content of citric acid monohydrate, $C_6H_8O_7,H_2O$

4.75 to 5.25% w/v.

Content of potassium citrate, $C_6H_5K_3O_7,H_2O$

28.5 to 31.5% w/v.

IDENTIFICATION

A. Yields reaction A characteristic of *potassium salts*, Appendix VI.
B. Yields reaction B characteristic of *citrates*, Appendix VI.

ASSAY

For citric acid monohydrate

To 5 mL add 100 mL of *water*, boil, cool and titrate with carbonate-free *0.1M sodium hydroxide VS* using *thymol blue solution* as indicator. Each mL of carbonate-free *0.1M sodium hydroxide VS* is equivalent to 7.005 mg of $C_6H_8O_7,H_2O$.

For potassium citrate

To 1 g add 5 mL of *acetic anhydride* and 20 mL of *anhydrous acetic acid*, heat on a water bath for 20 minutes, allow to cool and carry out Method I for *non-aqueous titration*, Appendix VIII A, using *1-naphtholbenzein solution* as indicator. Each mL of *0.1M perchloric acid VS* is equivalent to 10.81 mg of $C_6H_5K_3O_7,H_2O$. Determine the *weight per mL* of the mixture, Appendix V G, and calculate the content of $C_6H_5K_3O_7,H_2O$, weight in volume.