



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

Potassium Iodate Tablets

[General Notices](#)

DEFINITION

Potassium Iodate Tablets contain Potassium Iodate.

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

Content of potassium iodate, KIO_3

95.0 to 105.0% of the stated amount.

IDENTIFICATION

- A. Shake a quantity of the powdered tablets containing 0.4 g of Potassium Iodate with 10 mL of [water](#) and filter (solution A). 1 mL of solution A yields reaction B characteristic of *potassium salts*, [Appendix VI](#).
- B. Add 1 g of [potassium iodide](#) and 1 mL of [hydrochloric acid](#) to 5 mL of solution A and shake. A brown colour is produced.

TESTS

Dissolution

Comply with the requirements for Monographs of the British Pharmacopoeia in the [dissolution test for tablets and capsules](#), [Appendix XII B1](#), using as the medium 900 mL of [water](#) and rotating the basket at 100 revolutions per minute. Filter the medium after first wetting the filter paper with [water](#) and note the volume of filtrate. Treat the filtrate as described under Assay beginning at the words 'To 50 mL of the filtrate ...'. Repeat the assay procedure without the dissolution medium. Calculate the total content of potassium iodate, KIO_3 , in the dissolution medium from the difference between the titrations.

Iodide

Shake a quantity of the powdered tablets containing 2.5 g of Potassium Iodate with 50 mL [water](#) and filter (solution B). Add 1 mL of 1.8M [sulfuric acid](#) and 1 mL of [chloroform](#) to 25 mL of solution B and shake. Any violet colour produced is not more intense than that of a solution prepared at the same time and in the same manner but using 5 mL of solution B and 2 mL of [iodide standard solution \(10 ppm I\)](#) (20 ppm).

ASSAY

Weigh and powder 20 tablets. Transfer a quantity of the powdered tablets containing 0.3 g of Potassium Iodate to an iodine flask, add 100 mL of [water](#), shake and filter. To 50 mL of the filtrate add 3 g of [potassium iodide](#) followed by 50 mL of

[2M hydrochloric acid](#). Stopper the flask, mix and stand in the dark for 5 minutes. Titrate the resulting solution with 0.1M [sodium thiosulfate VS](#) to a light straw colour and then complete the titration to a colourless end point using [starch solution](#) as indicator. Repeat the titration without the powdered tablets. The difference between the titrations represents the amount of sodium thiosulfate required. Each mL of 0.1M [sodium thiosulfate VS](#) is equivalent to 3.567 mg of KIO_3 .