



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

Iodised Oil Fluid Injection

[General Notices](#)

Action and use

Radio-opaque injection.

DEFINITION

Iodised Oil Fluid Injection is a sterile iodine addition product of the ethyl esters of the fatty acids obtained from poppy-seed oil.

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

Content of combined iodine

37.0 to 39.0% w/w.

CHARACTERISTICS

A straw-coloured or yellow, oily liquid.

Practically insoluble in [water](#); soluble in [chloroform](#), in [ether](#) and in [petroleum spirit](#) (boiling range, 40° to 60°).

IDENTIFICATION

Boil 0.05 mL with 2 mL of [glacial acetic acid](#) and 0.1 g of [zinc powder](#) for 2 minutes, add 5 mL of [water](#), shake, decant from any undissolved zinc and add 1 mL of [hydrogen peroxide solution \(20 vol\)](#). Iodine vapour is evolved.

TESTS

Acidity

To 5 mL of [chloroform](#) add 5 mL of [ethanol \(96%\)](#) previously neutralised to [phenolphthalein solution R1](#) with 0.1M [ethanolic sodium hydroxide VS](#), add 5 g of the injection, shake and titrate with 0.1M [ethanolic sodium hydroxide VS](#) using [phenolphthalein solution R1](#) as indicator. Not more than 1.0 mL is required to change the colour of the solution.

[Weight per mL](#)

1.28 to 1.30 g, [Appendix V G](#).

Free iodine

Shake 1 g with 1 mL of [starch mucilage](#) and 1 mL of [cadmium iodide solution](#). Any blue colour disappears on the addition of 0.4 mL of 0.01M [sodium thiosulfate](#).

ASSAY

Boil 1 g with 10 mL of [glacial acetic acid](#) and 1 g of [zinc powder](#) under a reflux condenser for 1 hour. Add through the condenser 30 mL of hot [water](#), filter through absorbent cotton, wash the flask with two 20 mL quantities of hot [water](#) and pass the washings through the filter. Cool the filtrate, add 25 mL of [hydrochloric acid](#) and 8 mL of [potassium cyanide solution](#) and titrate with [0.05M potassium iodate VS](#) until the dark brown solution which is produced becomes light brown; add 5 mL of [starch mucilage](#) and continue the titration until the blue colour disappears. Each mL of [0.05M potassium iodate VS](#) is equivalent to 12.69 mg of combined iodine.

STORAGE

Iodised Oil Fluid Injection should be kept in an atmosphere of carbon dioxide or nitrogen and protected from light.