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

Phenol and Glycerol Injection

General Notices

DEFINITION

Phenol and Glycerol Injection is a sterile solution containing 5% w/v of Phenol in Glycerol that has been previously dried at 120° for 1 hour.

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

Content of phenol, C_6H_6O

4.75 to 5.25% w/v.

CHARACTERISTICS

A pale straw-coloured, viscous solution.

IDENTIFICATION

A. Add *bromine water* to a 1% w/v solution. A white precipitate is produced, which, on the continued addition of *bromine water*, at first dissolves then reappears and becomes permanent.
B. To 0.5 mL add 5 mL of *water* and 0.05 mL of *sodium nitrite solution* and carefully pour on to the surface of *sulfuric acid*. A coloured zone, red above and green below, appears at the junction of the two layers.
C. When heated on a borax bead in a naked flame, it imparts a green colour to the flame.

ASSAY

Dissolve 2 g in sufficient *water* to produce 50 mL, transfer 25 mL to a 500 mL glass-stoppered flask and add 50 mL of 0.05 M *bromine VS* and 5 mL of *hydrochloric acid*, stopper, swirl occasionally during 30 minutes and allow to stand for a further 15 minutes. Add 5 mL of a 20% w/v solution of *potassium iodide*, taking care to avoid loss of bromine, shake thoroughly and titrate with 0.1M *sodium thiosulfate VS* until only a faint yellow colour remains. Add 0.1 mL of *starch mucilage* and 10 mL of *chloroform* and complete the titration with vigorous shaking. Repeat the operation without the injection. The difference between the titrations represents the amount of bromine required. Each mL of 0.05M *bromine VS* is equivalent to 1.569 mg of C_6H_6O. Determine the *weight per mL* of the injection, Appendix V G, and calculate the percentage w/v of C_6H_6O.

STORAGE

Phenol and Glycerol Injection should be protected from light.

LABELLING

The strength is stated as the percentage w/v of Phenol.