



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

Glutaraldehyde Solution

[General Notices](#)

DEFINITION

Glutaraldehyde Solution is a dilution of [Strong Glutaraldehyde Solution](#) in a mixture of Purified Water and Ethanol (96 per cent).

In making Glutaraldehyde Solution, Ethanol (96 per cent) may be replaced by Industrial Methylated Spirit¹.

Content of glutaraldehyde, C₅H₈O₂

9.2 to 10.5% w/v.

IDENTIFICATION

A. Heat 5 mL with 10 mL of a solution containing 1 g of [hydroxylamine hydrochloride](#) and 2 g of [sodium acetate](#) on a water bath for 10 minutes, allow to cool and filter. The [melting point](#) of the residue, after washing with [water](#) and drying at 105°, is about 178°, [Appendix V A](#).

B. To 1 mL add 2 mL of ammoniacal [silver nitrate solution](#) and mix gently for a few minutes. Silver is deposited.

TESTS

Ethanol content

50.0 to 60.0% v/v, [Appendix VIII F](#).

ASSAY

Mix 10 mL with 100 mL of a 7% w/v solution of [hydroxylamine hydrochloride](#) previously neutralised to [bromophenol blue solution](#) with [1M sodium hydroxide VS](#) and allow to stand for 30 minutes. Add 20 mL of [petroleum spirit](#) (boiling range, 40° to 60°) and titrate with [1M sodium hydroxide VS](#) until the colour of the aqueous phase matches that of a 7% w/v solution of [hydroxylamine hydrochloride](#) previously neutralised to [bromophenol blue solution](#) with [1M sodium hydroxide VS](#). Each mL of [1M sodium hydroxide VS](#) is equivalent to 50.05 mg of C₅H₈O₂.

¹ The law and the statutory regulations governing the use of Industrial Methylated Spirit must be observed.