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Change to read:

Standard Dichlorophenol–Indophenol Solution

To 50 mg of [2,6-dichlorophenol–indophenol sodium](#) that has been stored in a desiccator over [soda lime](#) add 50 mL of [water](#) containing 42 mg of [sodium bicarbonate](#), shake vigorously, and when the dye is dissolved, add [water](#) to make 200 mL. Filter into an amber, glass-stoppered bottle. Use within 3 days and standardize immediately before use.

Standardization

See [Volumetric Solutions, 1. Definitions](#).

See [Titrimetry \(541\)](#).

Standardize by one of the following procedures. [NOTE—Other standardization procedures may be used. See [Volumetric Solutions, 2. Preparation and Standardization, 2.3 Standardization](#).]

Standardization with visual endpoint: Accurately weigh 50 mg of [USP Ascorbic Acid RS](#), and transfer to a glass-stoppered, 50-mL volumetric flask with the aid of a sufficient volume of [metaphosphoric–acetic acids TS](#) to make 50 mL. Immediately transfer 2 mL of the ascorbic acid solution to an appropriate conical flask containing 5 mL of the [metaphosphoric–acetic acids TS](#), and titrate rapidly with the dichlorophenol–indophenol solution until a distinct rose-pink color persists for at least 5 s. Perform a blank titration by titrating 7 mL of the [metaphosphoric–acetic acids TS](#) plus a volume of [water](#) equal to the volume of the dichlorophenol–indophenol solution used in titrating the ascorbic acid solution. Express the concentration of the standard solution in terms of its equivalent in milligrams of ascorbic acid.

▲mg equivalent ascorbic acid/mL =
$$\frac{(\text{mg ascorbic acid}) \times 2 \times (\text{Assay}/100)}{50 \times \text{mL dichloropheol-indophenol (corrected for the blank)}}$$

where Assay is the content/potency of ascorbic acid.▲ (USP 1-May-2024)

Standardization with potentiometric endpoint: Accurately weigh 50 mg of [USP Ascorbic Acid RS](#), and transfer to a glass-stoppered, 50-mL volumetric flask with the aid of a sufficient volume of [metaphosphoric–acetic acids TS](#) to make 50 mL. Immediately transfer 2 mL of the ascorbic acid solution to an appropriate conical flask containing 5 mL of the [metaphosphoric–acetic acids TS](#), and 50 mL of [water](#). Titrate rapidly with the dichlorophenol–indophenol solution using a polarizable platinum or gold electrode. Perform a blank titration by titrating 7 mL of the [metaphosphoric–acetic acids TS](#) plus 50 mL of [water](#). Express the concentration of the standard solution in terms of its equivalent in milligrams of ascorbic acid.

▲mg equivalent ascorbic acid/mL =
$$\frac{(\text{mg ascorbic acid}) \times 2 \times (\text{Assay}/100)}{50 \times \text{mL dichloropheol-indophenol (corrected for the blank)}}$$

where Assay is the content/potency of ascorbic acid.▲ (USP 1-May-2024)

[NOTE—If this volumetric solution is used in a qualitative application such as pH adjustment, dissolution medium, or diluent, its standardization is not required.]

Auxiliary Information - Please [check for your question in the FAQs](#) before contacting USP.

Topic/Question	Contact	Expert Committee
STANDARD DICHLOROPHENOL–INDOPHENOL SOLUTION	Margareth R.C. Marques Principal Scientific Liaison	HDQ Headquarters

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