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Change to read:

0.1 M Tetramethylammonium Chloride VS

▲ (USP 1-Dec-2022)

Dissolve 10.96 g of [tetramethylammonium chloride](#)▲(CH₃)₄NCl▲ (USP 1-Dec-2022) in [water](#) to make 1000 mL.

Standardization

▲See [Volumetric Solutions, 1. Introduction](#).

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:▲ (USP 1-Dec-2022) Transfer an accurately measured volume of about 40 mL of the solution to a flask, add 10 mL of [diluted nitric acid](#) and 50.0 mL of [0.1 N silver nitrate VS](#), and mix. Add 5 mL of [nitrobenzene](#) and 2 mL of [ferric ammonium sulfate TS](#), shake, and titrate the excess silver nitrate with [0.1 N ammonium thiocyanate VS](#).

$$\text{▲M} = \frac{\left(50.0 - \frac{\text{ml NH}_4\text{SCN} \times \text{N AgNO}_3}{\text{N AgNO}_3}\right) \times \text{N AgNO}_3}{\text{ml (CH}_3)_4\text{NCl}}$$

Standardization with potentiometric endpoint: Transfer an accurately measured volume of about 10 mL of the solution to a flask, add 2 mL of [diluted nitric acid](#), and titrate with [0.1 N silver nitrate VS](#) using a combined silver electrode.

$$\text{M} = \frac{\text{ml AgNO}_3 \times \text{N AgNO}_3}{\text{ml (CH}_3)_4\text{NCl}} \text{▲ (USP 1-Dec-2022)}$$

[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 |
|---------------------------------------|--|------------------|
| 0.1 M TETRAMETHYLAMMONIUM CHLORIDE VS | Margareth R.C. Marques Principal Scientific Liaison | HDQ Headquarters |

Most Recently Appeared In:

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