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Change to read:

0.1 M Edetate Disodium VS

▲ (USP 1-May-2021)

Dissolve 37.22 g of [edetate disodium](#) 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-May-2021) Accurately weigh about 400 mg of [chelometric standard calcium carbonate](#),

previously dried at ▲210° for 4 h ▲ (USP 1-May-2021) and cooled in a desiccator, or dried according to the label instructions, transfer to a 400-mL beaker, add 10 mL of [water](#), and swirl to form a slurry. Cover the beaker with a watch glass, and introduce 4 mL of [diluted hydrochloric acid](#) from a pipet inserted between the lip of the beaker and the edge of the watch glass. Swirl the contents of the beaker to dissolve the calcium carbonate. Wash down the sides of the beaker, the outer surface of the pipet, and the watch glass with [water](#), and dilute with [water](#) to about 200 mL. While stirring the solution, preferably with a magnetic stirrer, add about 30 mL of the edetate disodium solution from a 50-mL buret. Adjust the solution to a pH of 12–13 with [sodium hydroxide TS](#), add 300 mg of [hydroxy naphthol blue](#), and continue the titration with the edetate disodium solution to a blue endpoint.

$$\Delta M = \frac{(\text{gCaCO}_3) \times (\text{Assay}/100) \times 1000}{100.09 \times \text{mL EDTA}}$$

Standardization with potentiometric endpoint: Accurately weigh about 100 mg of [chelometric standard calcium carbonate](#), previously dried at 210° for 4 h and cooled in a desiccator, or dried according to the label instructions, transfer to a 400-mL beaker, add 10 mL of [water](#), and swirl to form a slurry. Cover the beaker with a watch glass, and introduce 1 mL of [diluted hydrochloric acid](#) from a pipet inserted between the lip of the beaker and the edge of the watch glass. Swirl the contents of the beaker to dissolve the calcium carbonate. Wash down the sides of the beaker, the outer surface of the pipet, and the watch glass with [water](#), and dilute with [water](#) to about 100 mL. Adjust the solution to a pH of 12–13 with [sodium hydroxide TS](#) and titrate potentiometrically with the edetate disodium solution using a combined calcium ion-selective electrode.

$$M = \frac{(\text{gCaCO}_3) \times (\text{Assay}/100) \times 1000}{100.09 \times \text{mL EDTA}} \quad \Delta \text{ (USP 1-May-2021)}$$

[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 EDETATE DISODIUM VS	Margareth R.C. Marques Principal Scientific Liaison	HDQ Headquarters

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