

Status: Currently Official on 15-Feb-2025
 Official Date: Official as of 01-May-2021
 Document Type: Reagents
 DocId: GUID-81FEEC64-FED5-4F83-B409-44CDCE9A51EF_2_en-US
 DOI: https://doi.org/10.31003/USPNF_R6071_02_01
 DOI Ref: qd8ux

© 2025 USPC
 Do not distribute

Change to read:

0.02 N Hydrochloric Acid VS

▲ (USP 1-May-2021)

Transfer 1.6 mL of [hydrochloric acid](#) to a 1000-mL volumetric flask containing about 250 mL of [water](#). Cool and dilute with [water](#) to volume. Alternatively, dilute 20 mL of [1 N hydrochloric acid VS](#) with [water](#) to 1000 mL.

Standardization

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

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

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

Standardization with potentiometric endpoint: ▲ (USP 1-May-2021) Accurately weigh about ▲25▲ (USP 1-May-2021) mg of [tromethamine](#), dried according to the label instructions or, if this information is not available, dried at 105° for 3 h, and dissolve in 50 mL of [water](#). ▲ Titrate potentiometrically with the hydrochloric acid solution using a combined pH electrode. ▲ (USP 1-May-2021) Each 2.4228 mg of tromethamine is equivalent to 1 mL of 0.02 N hydrochloric acid.

$$\text{▲N} = \frac{\text{mg tromethamine} \times (\text{Assay}/100)}{121.14 \times \text{mL HCl}} \text{▲ (USP 1-May-2021)}$$

[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 |
|-----------------------------|--|------------------|
| 0.02 N HYDROCHLORIC ACID VS | Margareth R.C. Marques Principal Scientific Liaison | HDQ Headquarters |

Most Recently Appeared In:

Pharmacopeial Forum: Volume No. 49(6)

Current DocID: [GUID-81FEEC64-FED5-4F83-B409-44CDCE9A51EF_2_en-US](#)

DOI: https://doi.org/10.31003/USPNF_R6071_02_01

DOI ref: [qd8ux](#)