

Status: Currently Official on 16-Feb-2025
 Official Date: Official as of 01-Dec-2020
 Document Type: Reagents
 DocId: GUID-6D6BBAE3-FECA-43F2-B347-BC86CE07DB3B_2_en-US
 DOI: https://doi.org/10.31003/USPNF_R8046_02_01
 DOI Ref: 0mrl5

© 2025 USPC
 Do not distribute

Add the following:

0.02 N Sodium Hydroxide VS

Transfer 20 mL of [1 N sodium hydroxide VS](#) to a 1000-mL volumetric flask. Dilute with [carbon dioxide-free water](#).

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: Accurately weigh about 100 mg of [potassium biphthalate](#), previously crushed lightly and dried at 120° for 2 h, and dissolve in 75 mL of [carbon dioxide-free water](#). Add 2 drops of [phenolphthalein TS](#), and titrate with the 0.02 N sodium hydroxide solution to the production of a permanent pink color.

where Assay is the content/potency of potassium biphthalate.

$$N = \frac{\text{g KHC}_8\text{H}_4\text{O}_4 \times (\text{Assay}/100)}{0.20422 \times \text{mL NaOH solution}}$$

Standardization with potentiometric endpoint: Accurately weigh about 50 mg of [potassium biphthalate](#), previously crushed lightly and dried at 120° for 2 h, and dissolve in 75 mL of [carbon dioxide-free water](#). Titrate potentiometrically with the 0.02 N sodium hydroxide solution using a combined pH electrode.

where Assay is the content/potency of potassium biphthalate.

$$N = \frac{\text{g KHC}_8\text{H}_4\text{O}_4 \times (\text{Assay}/100)}{0.20422 \times \text{mL NaOH solution}}$$

[NOTE—If this volumetric solution is used in a qualitative application such as pH adjustment, dissolution medium, or diluent, its standardization is not required.]▲ (USP 1-DEC-2020)

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

Topic/Question	Contact	Expert Committee
0.02 N SODIUM HYDROXIDE VS	Margareth R.C. Marques Principal Scientific Liaison	HDQ Headquarters

Most Recently Appeared In:

Pharmacopeial Forum: Volume No. 45(4)

Current DocID: [GUID-6D6BBAE3-FECA-43F2-B347-BC86CE07DB3B_2_en-US](#)

DOI: https://doi.org/10.31003/USPNF_R8046_02_01

DOI ref: [0mrl5](#)