

Status: Currently Official on 16-Feb-2025
 Official Date: Official as of 01-May-2023
 Document Type: Reagents
 DocId: GUID-03194880-9B7A-4135-8AC5-777F7504BD55_2_en-US
 DOI: https://doi.org/10.31003/USPNF_R3394_02_01
 DOI Ref: ne3kb

© 2025 USPC
 Do not distribute

Change to read:

0.1 N Alcoholic Sodium Hydroxide VS

▲ (USP 1-May-2023)

To 250 mL of [alcohol](#) add 2 mL of a 50% (w/v) solution of [sodium hydroxide](#).

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-2023) Dissolve about 200 mg of [benzoic acid](#), accurately weighed, in 10 mL of [alcohol](#) and 2 mL of [water](#). Add 2 drops of [phenolphthalein TS](#), and titrate with the alcoholic sodium hydroxide solution until a permanent pale pink color is produced.

$$\text{▲}N = \frac{\text{mg Benzoic Acid} \times (\text{Assay}/100)}{122.1 \times \text{mL Sodium Hydroxide}}$$

where Assay is the content/potency of benzoic acid.

Standardization with potentiometric endpoint: Dissolve about 200 mg of [benzoic acid](#), accurately weighed, in 50 mL of [alcohol](#) and 10 mL of [water](#). Titrate with the alcoholic sodium hydroxide solution using a combined pH electrode suitable for non-aqueous titration.

$$N = \frac{\text{mg Benzoic Acid} \times (\text{Assay}/100)}{122.1 \times \text{mL Sodium Hydroxide}}$$

where Assay is the content/potency of benzoic acid. ▲ (USP 1-May-2023)

[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 N ALCOHOLIC SODIUM HYDROXIDE VS	Margareth R.C. Marques Principal Scientific Liaison	HDQ Headquarters

Most Recently Appeared In:

Pharmacopeial Forum: Volume No. 47(6)

Current DocID: [GUID-03194880-9B7A-4135-8AC5-777F7504BD55_2_en-US](#)

DOI: https://doi.org/10.31003/USPNF_R3394_02_01

DOI ref: [ne3kb](#)