

Status: Currently Official on 16-Feb-2025
 Official Date: Official Prior to 2013
 Document Type: Reagents
 DocId: GUID-0A00F675-609B-4B75-9804-DFBE315B106C_1_en-US
 DOI: https://doi.org/10.31003/USPNF_R2446_01_01
 DOI Ref: 36m9l

© 2025 USPC
 Do not distribute

Sodium Borohydride,

NaBH_4 37.83 CAS RN[®]: 16940-66-2.—White, crystalline solid. Freely soluble in water; soluble (with reaction) in methanol. Its solutions are rapidly decomposed by boiling.

Assay

Potassium iodate solution: Dissolve 8.917 g, previously dried at 110° to constant weight and accurately weighed, in water to make 1000.0 mL.

Procedure: Dissolve about 500 mg, accurately weighed, in 125 mL of sodium hydroxide solution (1 in 25) in a 250-mL volumetric flask, dilute with the sodium hydroxide solution to volume, and mix. Pipet 10 mL of the solution into a 250-mL iodine flask, add 35.0 mL of *Potassium iodate solution*, and mix. Add 2 g of potassium iodide, mix, add 10 mL of dilute sulfuric acid (1 in 10), insert the stopper in the flask, and allow to stand in the dark for 3 minutes. Titrate the solution with 0.1 N sodium thiosulfate VS, adding 3 mL of starch TS as the endpoint is approached. Calculate the amount, in mg, of NaBH_4 in the specimen titrated by the formula:

$$[(35.0)(0.25)] - 0.1V)4.729$$

in which V is the volume, in mL, of 0.1 N sodium thiosulfate used in the titration. Not less than 98% is found.

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

Topic/Question	Contact	Expert Committee
SODIUM BOROHYDRIDE	Margareth R.C. Marques Principal Scientific Liaison	HDQ Headquarters

Most Recently Appeared In:

Pharmacopeial Forum: Volume No. Information currently unavailable

Current DocID: [GUID-0A00F675-609B-4B75-9804-DFBE315B106C_1_en-US](#)

DOI: https://doi.org/10.31003/USPNF_R2446_01_01

DOI ref: [36m9l](#)