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## 0.1 N Perchloric Acid in Dioxane VS

HClO<sub>4</sub> 100.46

10.05 g in 1000 mL

Mix 8.5 mL of [perchloric acid](#) with sufficient [dioxane](#) to make 1000 mL.

**Standardization:** Accurately weigh about 700 mg of [potassium biphthalate](#), previously crushed lightly and dried at 120° for 2 h, and dissolve in 50 mL of [glacial acetic acid](#) in a 250-mL flask. Add 2 drops of [crystal violet TS](#), and titrate with the perchloric acid solution until the violet color changes to bluish green. Carry out a blank determination. Each 20.422 mg of potassium biphthalate is equivalent to 1 mL of 0.1 N perchloric acid.

$$N = \frac{\text{g KHC}_8\text{H}_4\text{O}_4}{0.20422 \times \text{mL HClO}_4 \text{ solution (corrected for the blank)}}$$

[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 PERCHLORIC ACID IN DIOXANE VS	<a href="#">Margareth R.C. Marques</a> Principal Scientific Liaison	HDQ Headquarters

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