

Status: Currently Official on 15-Feb-2025
Official Date: Official as of 01-May-2017
Document Type: Reagents
DocId: GUID-2F63EEDE-EF48-4B86-98B7-7B9A53590518_1_en-US
DOI: https://doi.org/10.31003/USPNF_R3377_01_01
DOI Ref: 51k10

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0.1 N Lithium Methoxide in Methanol VS

CH_3OLi , 37.97
3.798 g in 1000 mL

Dissolve 700 mg of freshly cut [lithium](#) metal in 150 mL of [methanol](#), cooling the flask during addition of the metal. When the reaction is complete, add 850 mL of [methanol](#). If cloudiness or precipitation occurs, add sufficient [methanol](#) to clarify the solution. Store preferably in the reservoir of an automatic delivery buret suitably protected from carbon dioxide and moisture.

Standardization: Accurately weigh about 400 mg of primary standard [benzoic acid](#), and dissolve in 80 mL of [dimethylformamide](#) in a flask. Add 3 drops of a 1 in 100 solution of [thymol blue](#) in [dimethylformamide](#), and titrate with the lithium methoxide solution to a blue endpoint. Correct for the volume of the lithium methoxide solution consumed by 80 mL of the [dimethylformamide](#). Each 12.21 mg of benzoic acid is equivalent to 1 mL of 0.1 N lithium methoxide. [NOTE—Restandardize the solution frequently.]

$$N = \frac{\text{mg benzoic acid}}{122.12 \times \text{mL lithium methoxide (corrected for the blank)}}$$

[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 LITHIUM METHOXIDE IN METHANOL VS	Margareth R.C. Marques Principal Scientific Liaison	HDQ Headquarters

Most Recently Appeared In:
Pharmacopeial Forum: Volume No. PF 41(6)

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