

Lithium Methoxide, 10% in Methanol CAS No. 865-34-9

QS-PDS-014 Revision: 06 Date of Last Revision: June 12, 2024

Formula: Li-OCH<sub>3</sub>

**Appearance:** Colorless to pale yellow solution

Application: LiOMe is a mild base used mainly in organic synthesis, most often

in transesterifications. This reagent is offered currently in methanol solution of LiOMe (2.2M) and therefore is very easy to transfer from shipping container to storage or reactor. On contact with moisture, it is converted to methanol and lithium hydroxide causing the solution to become cloudy. For leading references, consult *J. Mater. Res.* 

**1999**, *14*, 1510.

Product Specifications: Lithium Methoxide, wt. % 9.8 min 10.2 max

\* This product can be made to agreed upon customer

specifications.

Other Data: Solvent Methanol

Physical Properties: Molecular Weight 37.97

Contained LiOMe 85 g/L (0.71 lb/gal)
Pyrophoricity Non-pyrophoric
Density @ 20°C 0.83 g/mL

**Solubility:** Methanol is the best solvent for LiOMe as it has very low solubility

in many common solvents including THF (tetrahydrofuran).

**Thermal Stability:** LiOMe in methanol is very stable at room temperature. At 40°C,

solutions could very slowly become hazy because of desolvation of

the LiOMe.

Toxicity / Safety Data / Information on toxicity, safety, handling, storage and disposal is

Handling / Storage / Disposal: contained in the Safety Data Sheet (SDS) for this product.

**Shipping Containers:** Bulk Containers 17,500 – 24,000 L

 Cylinders
 #20 – 420 L

 Drums
 55 gallon

 Glass Bottles
 125 mL, 500 mL



## Shipping Limitations:

Shipments of LiMeO are described as "UN3286, FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S. (LITHIUM METHOXIDE, METHANOL), 3, (6.1, 8), PGII". Shipments require "Flammable Liquid", "Corrosive" AND "Toxic" Labels.

Post, Parcel	Not acceptable	
Sea	Class 3 (6.1, 8)	(IMDG)
Road, Rail (USA)	Class 3 (6.1, 8)	(DOT)
Air	Class 3 (6.1, 8)	(IATA)