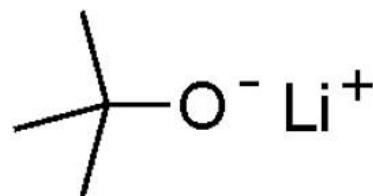


TECHNICAL DATA SHEET

Date of Issue: 2025/02/24

Lithium tert-Butoxide, typ. 20 % solution in THF (typ. 2.2 M)



CAS-No.	1907-33-1
EC-No.	217-611-5
REACH No.	01-2120138357-54-0000
Molecular formula	C ₄ H ₉ OLi
Product number	10000127, 10001480, 10001481, 10001482, 10001483, 10001484

APPLICATION Deprotonation reactions in organic synthesis.

SPECIFICATION

Lithium tert-Butoxide	19,0 – 21,0 %
LiOH + Li ₂ CO ₃	max. 0.1 %

calculated as LiOH

METHOD OF ANALYSIS

Potentiometric titration of the hydrolyzed product for the determination of total base. Detailed description available on request. Determination of LiOH by Karl Fischer titration.

The information presented herein is believed to be accurate and reliable, but is presented without guarantee or responsibility on the part of Albemarle Corporation and its subsidiaries and affiliates. It is the responsibility of the user to comply with all applicable laws and regulations and to provide for a safe workplace. The user should consider any health or safety hazards or information contained herein only as a guide, and should take those precautions which are necessary or prudent to instruct employees and to develop work practice procedures in order to promote a safe work environment. Further, nothing contained herein shall be taken as an inducement or recommendation to manufacture or use any of the herein materials or processes in violation of existing or future patent.

Technical data sheets may change frequently. You can download the latest version from our website www.albemarle.com.

Please contact us at www.albemarle.com/contact with questions.

PHYSICAL PROPERTIES

Appearance	liquid
Color	yellow to brown
Melting point/range	< 5 °C
Flash point	-21.2 °C 1,013 hPa (Tetrahydrofuran)
Boiling point/boiling range	65 °C at 1,013 hPa (Tetrahydrofuran)
Density	0.89 g/cm ³ at 20 °C
Water solubility	(Not applicable)
Molecular weight	80.06 g/mol

HANDLING & STORAGE

Handling	Lithium tert-Butoxide should be handled under inert gas atmosphere. Avoid contact with eyes, skin and clothes as well as inhalation. Lithium tert-Butoxide decomposes in contact with humidity. Vapors may form explosive mixtures with air. Vapors are heavier than air and may spread along floors. Flash-back possible over considerable distance. Use only explosion-proof equipment. Take precautionary measures against electrostatic. Protect from frost, heat and sunlight. In case of fire use dry extinguisher on basis of sodium chloride or limestone powder. Never use water, foam or CO ₂ -extinguishers. Pay also attention to the Safety Data Sheet.
Storage	Lithium tert-Butoxide should be stored in tightly closed containers under exclusion of humidity at gentle temperatures. Keep away from heat, sparks and fire. Pay also attention to the Safety Data Sheet. When stored according to SDS the material is fairly stable. We still recommend to retest the material 6 months after date of analysis if included on CoA. If not included, use the date of manufacturing for the calculation.

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TRANSPORT & PACKAGING

UN number 2924

ADR	Class: 3	PG: II	Label: 3 (8)
RID	Class: 3	PG: II	Label: 3 (8)
IMDG	Class: 3	PG: II	Label: 3 (8)
IATA_C	Class: 3	PG: II	Packing instruction (cargo aircraft): 363
IATA_P	Class: 3	PG: II	Packing instruction (passenger aircraft): 352

Hazard pictograms



Signal Word

Danger

H&P Phrases

See Safety Data Sheet

Labelling

The labelling is according to EU-GHS classification ((EG) 1272/2008) and may vary in other countries. Please refer to the respective Safety Data Sheet for your country.

Packaging

Glass bottles of 250 and 1,000 mL. Steel bottles with volumes of 27, 127 or 450 L. For safety reasons these are filled to a maximum of 90 %. Steel drums 200 L.

OTHER INFORMATION

Further Related Documents

Safety Data Sheet

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