

TECHNICAL DATA SHEET

Date of Issue: 2025/02/17

Lithium tert-Butoxide, powder

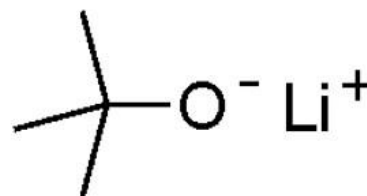
CAS-No. 1907-33-1

EC-No. 217-611-5

REACH No. 01-2120138357-54-0000

Molecular formula C₄H₉OLi

Product number 10000126, 10001472, 10001473



APPLICATION Deprotonation reactions in organic synthesis.

SPECIFICATION

Lithium tert-Butoxide 99,0 - 101,5 %

LiOH + Li₂CO₃ max. 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.

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PHYSICAL PROPERTIES

Appearance	powder
Color	white to beige
Melting point/range	ca. 283 °C
Density	0.89 g/cm ³ at 25 °C Method: OECD Test Guideline 109
Bulk density	500 kg/m ³
Water solubility	(Not applicable)
Solubility in other solvents	20 g/l at 20 °C Medium: tert-butyl alcohol
	50 g/l at 20 °C Medium: Toluene
	130 g/l at 20 °C Medium: Heptane
	230 g/l at 20 °C Medium: Tetrahydrofuran
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. Dust may form explosive mixtures with air. 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 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 2925

ADR	Class: 4.1	PG: II	Label: 4.1 (8)
RID	Class: 4.1	PG: II	Label: 4.1 (8)
IMDG	Class: 4.1	PG: II	Label: 4.1 (8)
IATA_C	Class: 4.1	PG: II	Packing instruction (cargo aircraft): 448
IATA_P	Class: 4.1	PG: II	Packing instruction (passenger aircraft): 445

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

Inner packing: 2 x Polyethylene bags up to 100 kg net. Outer packing: 110 or 220 l open lid steel drums with 40 or 100 kg net.

OTHER INFORMATION

Further Related Safety Data Sheet
Documents

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