

## TECHNICAL DATA SHEET

Date of Issue: 2025/02/17

# Lithium tert-Butoxide, powder

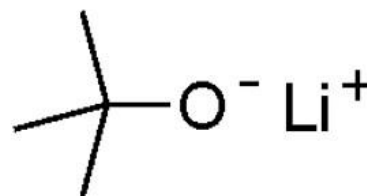
CAS-No. 1907-33-1

EC-No. 217-611-5

REACH No. 01-2120138357-54-0000

Molecular formula C<sub>4</sub>H<sub>9</sub>OLi

Product number 10000126, 10001472, 10001473



**APPLICATION** Deprotonation reactions in organic synthesis.

## SPECIFICATION

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

LiOH + Li<sub>2</sub>CO<sub>3</sub> 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 <sup>3</sup> at 25 °C Method: OECD Test Guideline 109 |
| Bulk density                 | 500 kg/m <sup>3</sup>                                           |
| 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                                                     |

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## 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 <sub>2</sub> -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.<br>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.

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## OTHER INFORMATION

Further Related                      Safety Data Sheet  
Documents

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