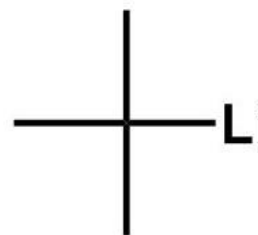


TECHNICAL DATA SHEET

Date of Issue: 2025/02/25

tert-Butyllithium, typ. 18 % solution in Pentane (typ. 1.9 M)



CAS-No.	594-19-4
EC-No.	209-831-5
REACH No.	01-2120138354-60-0000
Molecular formula	C ₄ H ₉ Li
Product number	10001581, 10001582, 10001583, 10001584, 10006838

APPLICATION Alkylating and metalating agent. Reagent for the introduction of the tert-butyl group.

SPECIFICATION

Active base:	17,0 - 19,0 %
Total base:	n.q.
Free base:	max. 1,7 %

METHOD OF ANALYSIS

Determination of assay as active base by thermometric titration. Determination of total base by potentiometric titration after hydrolysis. Free base is calculated from total and active base. Detailed description available on request.

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	light yellow
Flash point	-40 °C (Pentane)
Boiling point/boiling range	36 °C at 1013.250 hPa (Pentane)
Density	ca. 0.67 g/cm ³ at 20 °C
Water solubility	(Not applicable)
Molecular weight	64.06 g/mol
Additional Physical Properties	Clear to slightly turbid liquid (slight turbidity has no impact on quality and reactivity).

HANDLING & STORAGE

Handling	Handling only under inert gas. The product may ignite spontaneously on contact with air, especially if the solvent is evaporated quickly. Therefore the danger of ignition is enhanced if the solution comes in contact with surface rich materials (paper, textiles) or if it is sprayed. Avoid contact with eyes, skin and clothes as well as inhalation. 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 measures against electrostatic discharges. Protect from frost, heat and sunlight. Never add water, acids or oxidizing materials to the product. In case of fire use dry extinguishers on basis of sodium chloride or limestone powder. Never use water or CO ₂ -extinguishers. Pay attention to the safety data sheet.
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Storage Store between 10 and 20 °C, preferred at +10°C. The solution should be stored in tightly closed containers in a well ventilated cool place.
 When stored according to SDS the material has limited stability due to decomposition over time. We therefore recommend to retest the material 6 month after date of analysis if included on CoA. If not included, use the date of manufacturing for the calculation.
 Decomposition rate:
 - at 20°C 0,015%
 - at 30°C 0,12%
 loss of active base per month
 Sublimation: 70°C at 0,1 mbar

TRANSPORT & PACKAGING

UN number 3394

ADR	Class: 4.2	PG: I	Label: 4.2 (4.3)
RID	Class: 4.2	PG: I	Label: 4.2 (4.3)
IMDG	Class: 4.2	PG: I	Label: 4.2 (4.3)
IATA_C	Class: 4.2		
IATA_P	Class: 4.2		

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.

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Packaging

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

OTHER INFORMATION

Further Related Documents	Safety Data Sheet
Our brochure(s)	Organolithium Compounds

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