TECHNICAL DATA SHEET

Date of Issue: 2017/11/15

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

Molecular Formula C₄H₉Li

Product Number 401835

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

FURTHER INGREDIENTS

Pentane

CAS-No. 109-66-0 EC-No. 203-692-4 EC-No. 203-692-4

Isopentane; 2-methylbutane CAS-No. 78-78-4 EC-No. 201-142-8

SPECIFICATION

tert-Butyllithium, typ. 18 %: 18 +/- 1 % Sublimation: 70 °C at 0.1 mbar

Decomposition rate:

- at 20 °C 0.015 % - at 30 °C 0.12 %

loss of active base per month

METHOD OF ANALYSIS

Determination of assay as 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.



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PHYSICAL PROPERTIES

Appearance liquid

Color light yellow

Flash point < -56 °C (Pentane)

Boiling point/boiling

range

27 °C (Pentane)

Density ca. 0.67 g/cm3 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).

Very good solubility in all hydrocarbon solvents.

HANDLING & STORAGE

Handling Handling only under inert gas (nitrogen or argon). 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.

Pay attention to official safety regulations (see also: 'Transport regulations' and

'GHS Hazard Pictograms', especially fire-fighting).

Storage Store below 20 °C. Under exclusion of air and humidity the solution is fairly stable.

The solution should be stored in tightly closed containers in a well ventilated cool

place.

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		

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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 100, 250, 500 and 1,000 ml. Steel bottles and containers with nominal volumes of 7.4, 27, 127 and 450 l. For safety reasons these are filled to a maximum of 90 %.

OTHER INFORMATION

Further Related

Safety Data Sheet

Documents

Our brochure(s) Organolithium Compounds, Butyllithium

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