

TECHNICAL DATA SHEET

Date of Issue: 2017/09/07

Ethyllithium, typ. 8 % solution in Dibutyl Ether (typ. 1.7 M)

CAS-No.	811-49-4
EC-No.	212-370-2
Molecular Formula	C_2H_5Li
Product Number	401700

APPLICATION	Ethylating agent; strong organometallic base.
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FURTHER INGREDIENTS

Dibutyl ether

CAS-No.	142-96-1
EC-No.	205-575-3

SPECIFICATION

Ethyllithium: 7 - 9 % (active base)

METHOD OF ANALYSIS

Active base: total base minus free base

Total base: titration of base after hydrolysis of ethyllithium

Free base: reaction of ethyllithium with benzylchloride; hydrolysis and titration of residual base

PHYSICAL PROPERTIES

Appearance	liquid
Color	colorless to yellowish

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



Melting point/ range	-95.2 °C at 1,013 hPa (Information taken from reference works and the literature.)
Flash point	25 °C (Di-n-butyl ether)
Boiling point/boiling range	140.2 °C at 1,013 hPa (Di-n-butyl ether)
Density	ca. 0.76 g/cm ³ at 20 °C
Water solubility	(Not applicable)
Molecular weight	36.00 g/mol
Thermal Stability	No crystallization expected when stored at low temperature (-10 °C).
Additional Physical Properties	<p>Stability:</p> <p>Ethyllithium is known to cleave ethers. Nevertheless, the solution in dibutyl ether shows sufficient stability to be used on an industrial scale.</p> <p>Decomposition rates:</p> <p>at 20 °C: abt. 0.25 % loss of active base / day</p> <p>at 30 °C: abt. 0.75 % loss of active base / day</p> <p>at 40 °C: abt. 2.50 % loss of active base / day</p>

HANDLING & STORAGE

Handling	Keep away from sources of ignition. Take precautionary measures against static discharges. Handling only under inert gas (nitrogen or argon). Product is spontaneously flammable in air. Pay attention to official safety regulations (see also: "Transport regulations" and "Marking").
Storage	Keep container tightly closed in a cold-storage depot or refrigerator, if intended to be stored for longer periods (see: "Decompositions rate"). Crystallization is not expected when stored at low temperatures (-10 °C).

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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.

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

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