TECHNICAL DATA SHEET

Date of Issue: 2025/02/19

Methyllithium, typ. 8,0 % solution in Diethoxymethane (typ. 3 M)

CAS-No.	917-54-4
EC-No.	213-026-4
REACH No.	01-2120065574-52-0000 01-2120065574-52-0001
Molecular formula	CH3Li
Product number	10000121, 10000122, 10000123, 10000737, 10001457, 10001458, 10001459, 10001460, 10001461, 10002123

APPLICATION

Methylating agent e.g. in the synthesis of steroids; strong organo-metallic base.

SPECIFICATION

Methyllithium: 7,7 – 8,3 %

METHOD OF ANALYSIS

Determination of assay as total base by potentiometric titration after hydrolysis, 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	colorless to light yellow
Flash point	-7 °C
Boiling point/boiling range	88 °C at 1,013 hPa
Density	ca. 0.83 g/cm3 at 20 °C
Water solubility	(Not applicable)
Molecular weight	21.98 g/mol
Thermal Stability	No crystallization expected at low temperatures (-10 °C)
Additional Physical Properties	Decomposition rate: at room temperature: abt. 0.02 % loss of active base / day at 30 °C: abt. 0.08 % loss of active base / day

HANDLING & STORAGE

Handling	Methyllithium should only be handled under inert gas atmosphere. Catches fire spontaneously if exposed to air. 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 CO2-extinguishers. Pay attention to the safety data sheet.
Storage	Keep container tightly closed and in a cold-storage depot or refrigerator, if intended to be stored for longer periods (see: “decomposition rate“). When stored according to SDS the material has limited stability due to decomposition over time. We therefore 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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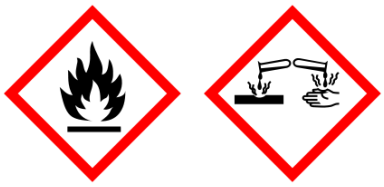
TRANSPORT & PACKAGING

UN number 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, 40, 127, 450 and 2500 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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