TECHNICAL DATA SHEET

Date of Issue: 2025/02/19

Methyllithium, typ. 6 % solution in Diethyl Ether with Lithium Bromide (typ. 2.2 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	10000124, 10000125, 10001469, 10001470, 10001471

APPLICATION

Methylating agent. Lithiation of organic compounds. The solution contains lithium bromide as a complexing agent. This increases selectivity and reduces reactivity of Methyllithium.

SPECIFICATION

Total base	6,0 - 7,0 %
Active base	6,0 - 6,3 %
LiBr	9,0 - 11,0 %

METHOD OF ANALYSIS

Determination of assay as total base by potentiometric titration after hydrolysis. Determination of assay as active base by thermometric titration. LiBr analyzed by argentometric / potentiometric titration.

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PHYSICAL PROPERTIES

Appearance	liquid
Color	colorless to light yellow
Crystallization temperature	ca. -4 °C
Flash point	-45 °C (Diethyl ether)
Boiling point/boiling range	ca. 34.7 °C at 1,013 hPa (Diethyl ether)
Density	ca. 0.81 g/cm3 at 20 °C
Water solubility	(Reacts violently with water.)
Molecular weight	21.98 g/mol

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	Recommended storage temperature: 5-15 °C. Keep container tightly closed. 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 1,000 mL. Steel bottles and containers with nominal volumes of 7.4, 27 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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