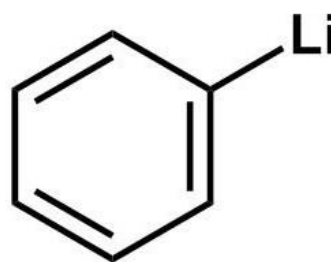


TECHNICAL DATA SHEET

Date of Issue: 2025/02/24

Phenyllithium, typ. 20 % solution in Dibutyl Ether (1.9 M)



CAS-No.	591-51-5
EC-No.	209-720-1
REACH No.	01-2119510130-65-0000
Molecular formula	C ₆ H ₅ Li
Product number	10000743, 10001462, 10001463, 10001464, 10001465, 10002151, 10004881

APPLICATION Reagent for the introduction of a phenyl group and mild metalating agent.

SPECIFICATION

Total base:	18,0 - 21,0 %
Active base:	17,6 - 20,4 %
Chlorobenzene:	max. 0,1%
Biphenyl:	max. 2,4 %
Sum Hexane:	max. 1,5 %
Benzene:	max. 1,0 %
MTBE:	max. 0,1 %

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.

METHOD OF ANALYSIS

Determination of total base by potentiometric titration. Determination of active base by thermometric titration. Chlorobenzene, Biphenyl, sum Hexanes, Benzene and MTBE are detected by GC. Detailed description available on request.

PHYSICAL PROPERTIES

Appearance	liquid
Color	dark red to dark brown
Flash point	28 °C (Di-n-butyl ether)
Boiling point/boiling range	140.2 °C at 1,013 hPa (Di-n-butyl ether)
Density	0.81 g/cm ³ at 20 °C
Water solubility	(Not applicable)
Molecular weight	84.05 g/mol

HANDLING & STORAGE

Handling	Phenyllithium should only be handled under inert gas atmosphere. 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.
Storage	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. The material should be stored at temperatures between -5 and +9°C. Decomposition does not cause appreciable pressure build up. Keep container tightly closed.

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TRANSPORT & PACKAGING

UN number 2920

ADR	Class: 8	PG: II	Label: 8 (3)
RID	Class: 8	PG: II	Label: 8 (3)
IMDG	Class: 8	PG: II	Label: 8 (3)
IATA_C	Class: 8	PG: II	Packing instruction (cargo aircraft): 855
IATA_P	Class: 8	PG: II	Packing instruction (passenger aircraft): 851

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 and 1,000 mL. Steel bottles and containers with nominal volumes of 27, 127, 450, 2500 L and ISO tanks. 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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