

TECHNICAL DATA SHEET

Date of Issue: 2025/11/12

Lithium Triethylborohydride, typ. 12 % solution in THF (typ. 1.0 M)

CAS-No.	22560-16-3
EC-No.	245-076-8
REACH No.	01-2120763165-54-0000
Molecular formula	C ₆ H ₁₆ B .Li
Product number	10001515, 10001516, 10001517, 10004792

APPLICATION Powerful and selective reducing agent for several functional groups like ester or amides

SPECIFICATION

Lithium Triethylborohydride: 11 - 13 %

METHOD OF ANALYSIS

Volumetric determination of hydrogen gas evolved on hydrolysis. Detailed description available on request.

PHYSICAL PROPERTIES

Appearance	liquid
Colour	colourless

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.



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Melting point/freezing point	-108.44 °C at 1,013 hPa (Tetrahydrofuran)
Flash point	-21.2 °C 1,013 hPa (Tetrahydrofuran)
Boiling point/boiling range	65 °C at 1,013 hPa (Tetrahydrofuran)
Density	0.89 g/cm ³ at 20 °C
Water solubility	(Not applicable)
Molecular weight	105.94 g/mol

HANDLING & STORAGE

Handling	The material should only be handled under inert gas. Contact with air and moisture results in rapid decomposition. 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. Protect from heat and direct sunlight. Never add water or oxidizing materials. Do not store near acids. In case of fire use dry extinguishers on basis of sodium chloride or limestone powder. Never use water, CO ₂ or foam. Pay attention to the Safety Data Sheet - Section 7.
Storage	When stored according to MSDS the material has limited stability due to decomposition over time. We therefore recommend to consume the material within a period of 6 months after receipt. For optimum storage stability keep temperatures between -10°C and 5°C.

TRANSPORT & PACKAGING

UN number 3399

ADR	Class: 4.3	PG: I	Label: 4.3 (3)
RID	Class: 4.3	PG: I	Label: 4.3 (3)
IMDG	Class: 4.3	PG: I	Label: 4.3 (3)
IATA_C	Class: 4.3	PG: I	Packing instruction (cargo aircraft): 494
IATA_P	Class: 4.3	PG: I	

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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 to 1,000 ml. Steel bottles and containers with nominal volumes of 5.0, 40, 125 or 450 l. For safety reasons these are filled to a maximum of 90 %.

OTHER INFORMATION

Further Related Documents

Safety Data Sheet

Our brochure(s)

Trifold - Reductions with Metal Hydrides in Organic Synthesis

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