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	C6-H16-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

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/cm3 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, CO2 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	

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)	Trifolder - Reductions with Metal Hydrides in Organic Synthesis