

# TECHNICAL DATA SHEET

Date of Issue: 2016/12/14

## Lithium Borohydride, typ. 10 % solution in THF

CAS-No. 16949-15-8

EC-No. 241-021-7

Molecular Formula  $\text{LiBH}_4$

Product Number 401653

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### APPLICATION

Selective reduction of esters, carboxylic acids, amides, epoxides, ketones and aldehydes in the presence of other functional groups such as nitriles, nitro groups, alkenes and halides. The addition of a stoichiometric amount of methanol increases significantly the reducing power without affecting the selectivity.

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### FURTHER INGREDIENTS

Tetrahydrofuran

CAS-No. 109-99-9

EC-No. 203-726-8

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### SPECIFICATION

Lithium Borohydride: 9.5 – 10.5 %

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### METHOD OF ANALYSIS

Analytical method: Volumetric determination of hydrogen evolved on hydrolysis. Detailed description available on request.

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### PHYSICAL PROPERTIES

Appearance turbid liquid

Color light gray

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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-lithium.com](http://www.albemarle-lithium.com). Please contact us at [www.albemarle-lithium.com/contact](http://www.albemarle-lithium.com/contact) with questions.



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Flash point	-21.2 °C (Tetrahydrofuran)
Boiling point/boiling range	66 °C (Tetrahydrofuran)
Density	ca. 0.89 g/cm <sup>3</sup> at 20 °C
Bulk density	(Not applicable)
Water solubility	(Not applicable)
Molecular weight	21.78 g/mol
Additional Physical Properties	Vapor pressure of the solvent: 200 mbar (20 °C)

## HANDLING & STORAGE

Handling	Handle under nitrogen or argon blanket, as contact with air results in rapid decomposition. Contact with materials containing cellulose may lead to spontaneous combustion. Pay attention to official safety regulations (see also: "Transport regulations").
Storage	Under exclusion of air and humidity, the solutions are fairly stable. We recommend not to exceed a storage temperature of 25 °C and to use the product within a period of six months after receipt.

## 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, 250, 500 and 1,000 ml. Steel bottles with volumes of 40, 125 or 450 l.

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OTHER INFORMATION

Further Related Documents

Safety Data Sheet

Our brochure(s)

Metal Hydrides

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