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	$LiBH_4$
Product Number	401653

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.

FURTHER INGREDIENTS

Tetrahydrofuran

CAS-No.	109-99-9
EC-No.	203-726-8

SPECIFICATION

Lithium Borohydride: 9.5 – 10.5 %

METHOD OF ANALYSIS

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

PHYSICAL PROPERTIES

Appearance	turbid liquid
Color	light gray

Flash point	-21.2 °C (Tetrahydrofuran)
Boiling point/boiling range	66 °C (Tetrahydrofuran)
Density	ca. 0.89 g/cm3 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

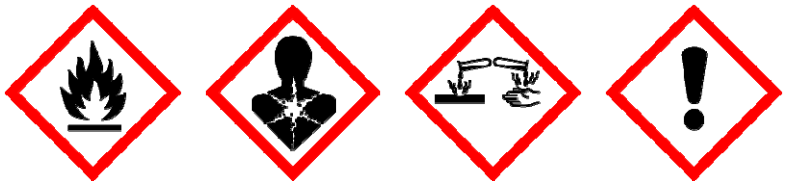
Handling	Handle under nitrogen or argon blanket, as contact with air results in rapid decomposition. Contact with materials containing cellulose may lead to spontaneous combustion. Pay attention to official safety regulations (see also: “Transport regulations”).
Storage	Under exclusion of air and humidity, 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	

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.

OTHER INFORMATION

Further Related Documents	Safety Data Sheet
Our brochure(s)	Metal Hydrides