TECHNICAL DATA SHEET

Date of Issue: 2016/12/07

Lithium Aluminum Hydride, typ. 8.5 % solution in THF (typ. 2.0 M)

CAS-No.	16853-85-3
EC-No.	240-877-9
REACH No.	01-2119919039-36
Molecular Formula	$LiAlH_4$
Product Number	401626

APPLICATION

Versatile reducing agent for organic chemical and pharmaceutical industry.

FURTHER INGREDIENTS

Tetrahydrofuran

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

SPECIFICATION

Lithium Aluminium Hydride: 8.1 - 8.9 %

METHOD OF ANALYSIS

Oxidimetric determination of active hydrogen content (Felkin's method): Oxidation by a solution of iodine, followed by back-titration of excess iodine with sodium thiosulphate solution.

PHYSICAL PROPERTIES

Appearance	turbid liquid
Color	gray

Flash point	-21.2 °C (Tetrahydrofuran)
Boiling point/boiling range	66 °C (Tetrahydrofuran)
Density	0.9 g/cm3 at 20 °C
Bulk density	(Not applicable)
Water solubility	(Not applicable)
Molecular weight	37.95 g/mol
Additional Physical Properties	Molarity abt. 2 Decomposition rate: abt. 0.06 % per month (20 °C based on total activity)

HANDLING & STORAGE

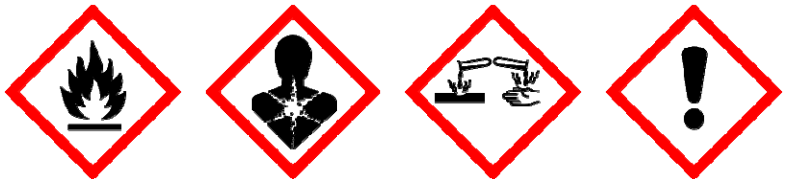
Handling	Dilute spilled solution with paraffin oil (but never with halogenated hydrocarbons, alcohols, ketons, esters etc.) and cover with ground limestone or cement. The soaked material should then be taken to a safe place and be decomposed from a safe distance by a jet of water. Pay also attention to the official safety regulations (see: GHS Hazard Pictograms). The safety data sheet is available on request. Please see also our brochure "Lithium Aluminium Hydride". In use may form flammable/explosive vapor-air mixtures. Harmful in contact with skin and if swallowed. Keep under argon or nitrogen. Keep container in a well ventilated place. Never add water to this product. Take precautionary measures against static discharges. In case of fire use powder based on sodium chloride or limestone powder. Never use water, halons or carbon dioxide.
Storage	Under exclusion of air and humidity, the solutions are fairly stable. However, even at room temperature slight decomposition with evolution of hydrogen is observed after prolonged storage. Decomposition rate: abt. 0.06 % per month (20 °C based on total activity). As decomposition accelerates with temperature, we recommend not to (continued) exceed a storage temperature of 20 °C and to use the product within a period of six months after receipt.

TRANSPORT & PACKAGING

UN number 1411

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): 480
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

Steel containers with the following characteristics, filled to max. 90 % according to the international transport regulations:

Nominal volume (l)	filled up to (l)	content of LiAlH4 (kg)
40	36	2.6
125	112	8.1
450	405	29.5

OTHER INFORMATION

Further Related Documents: Safety Data Sheet

Our brochure(s): Lithium Aluminum Hydride