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 LiAlH₄
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.
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Product Number: 401626
Date of Issue: 2016/12/07

TRANSPORT & PACKAGING

UN number 1411

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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

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

<table>
<thead>
<tr>
<th>Nominal volume (l)</th>
<th>filled up to (l)</th>
<th>content of LiAlH₄ (kg)</th>
</tr>
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<tbody>
<tr>
<td>40</td>
<td>36</td>
<td>2.6</td>
</tr>
<tr>
<td>125</td>
<td>112</td>
<td>8.1</td>
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<td>450</td>
<td>405</td>
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OTHER INFORMATION

Further Related Documents
Safety Data Sheet
Our brochure(s)
Lithium Aluminum Hydride

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. Please contact us at www.albemarle-lithium.com/contact with questions.