TECHNICAL DATA SHEET Date of Issue: 2016/12/07

Lithium-tri-(tert-butoxy)-Aluminum Hydride, typ. 30 % solution in THF (typ. 1.1 M)

C12H28AILiO3

EC-No. 241-490-8

Product Number 401624

Molecular Formula

APPLICATION

Reduction of acid chlorides to aldehydes. Stereoselective reductions of carbocyclic and steroid ketones. Reduction of aldehydes and ketones, leaving unaffected halogen-, ester-, lactone, amide-, nitrile-, nitro- and/or epoxy-groups as well as carbon and carbon multiple bonds.

FURTHER INGREDIENTS

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

SPECIFICATION

LTTBA: 29 - 32 %

METHOD OF ANALYSIS

Gasvolumetric determination. Detailed description available on request.

PHYSICAL PROPERTIES

Color

Appearance clear to turbid liquid

light gray

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/contact with questions.



| Flash point | -21.2 °C (Tetrahydrofuran) |
|--------------------------------|----------------------------|
| Boiling point/boiling range | 66 °C (Tetrahydrofuran) |
| Density | ca. 0.9 g/cm3 at 20 °C |
| Water solubility | (Not applicable) |
| Molecular weight | 254.28 g/mol |

| Additional Physical | Solvent: Tetrahydrofuran |
|---------------------|--------------------------|
| Properties | |

HANDLING & STORAGE

| Handling | Dilute spilled solution with paraffin oil (but never with halogenated hydrocarbons, alcohols, ketones, esters) and cover with dry sand, 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 attention to official safety regulations (see also "Transport Regulations" and "Marking"). |
|----------|---|
| Storage | Under exclusion air and humidity, the solutions are fairly stable. However even at room temperature slight decomposition with evolution of hydrogen is observed after prolonged storage. |

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 |
|-------------|--------|
| •.g | = age. |

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 and containers with nominal volumes of 5, 40, 125 or 450 I. For safety reasons these are filled to a maximum of 90 %.

OTHER INFORMATION

Further RelatedSafety Data SheetDocumentsOur brochure(s)Metal Hydrides

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