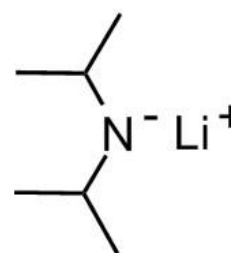


TECHNICAL DATA SHEET

Date of Issue: 2025/11/28

Lithium Diisopropylamide, typ. 28 % solution in Heptane / THF / Ethylbenzene (typ. 2.1 M)



| | |
|-------------------|---|
| CAS-No. | 4111-54-0 |
| EC-No. | 223-893-0 |
| REACH No. | 01-2119917565-33-0001 |
| Molecular formula | LiC ₆ H ₁₄ N |
| Product number | 10000280, 10000281, 10001652, 10001653, 10001654, 10001655, 10001656, 10001657, 10001658, 10001659, 10001660 |

APPLICATION Strong, low-nucleophilic base for e.g. enolisations.

FURTHER INGREDIENTS

tetrahydrofuran

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

ethylbenzene

| | |
|---------|-----------|
| CAS-No. | 100-41-4 |
| EC-No. | 202-849-4 |

heptane

| | |
|---------|-----------|
| CAS-No. | 142-82-5 |
| EC-No. | 205-563-8 |

diisopropylamine

| | |
|---------|-----------|
| CAS-No. | 108-18-9 |
| EC-No. | 203-558-5 |

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Technical data sheets may change frequently. You can download the latest version from our website www.albemarle.com.

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

SPECIFICATION

| | |
|-------------------|-------------------|
| LDA (active base) | 27 – 29 % (2.1 M) |
|-------------------|-------------------|

METHOD OF ANALYSIS

Thermometric titration with 2-butanol for the determination of active base. Potentiometric titration of the decomposed product for the determination of total base. Detailed description available on request.

PHYSICAL PROPERTIES

| | |
|-----------------------------|--------------------------------------|
| Appearance | liquid |
| Colour | slight yellow to red brown |
| Crystallization temperature | < 0 °C |
| Flash point | -21.2 °C 1,013 hPa (Tetrahydrofuran) |
| Boiling point/boiling range | 66 °C (Tetrahydrofuran) |
| Density | ca. 0.80 g/cm ³ at 20 °C |
| Water solubility | (Not applicable) |
| Molecular weight | 107.13 g/mol |

HANDLING & STORAGE

| | |
|----------|--|
| Handling | Lithium Diisopropylamide should be handled under inert gas atmosphere. Avoid contact with eyes, skin and clothes as well as inhalation. Vapors may form explosive mixtures with air. Vapors are heavier than air and may spread along floors. Flashback possible over considerable distance. Use only explosion-proof equipment. Take measures against electrostatic discharges. Protect from frost, heat and sunlight. Lithium Diisopropylamide decomposes in contact with humidity. In case of fire use dry extinguishers on basis of sodium chloride or limestone powder. Never use water or CO ₂ -extinguishers. Pay also attention to the Safety Data Sheet. |
|----------|--|

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Storage

Lithium Diisopropylamide should be stored in tightly closed containers under exclusion of humidity at gentle temperatures. The product tends to crystallize at temperatures below 0 °C. On prolonged storage at higher temperatures product is decomposing. Average decomposition rate: at 23 °C < 0.1 wt.% (of 28 %) per day at 40 °C < 0.3 wt.% (of 28 %) per day Recommended storage temperature: 0 - 15 °C. Keep away from heat, sparks and fire. Pay also attention to the Material Safety Data Sheet.

TRANSPORT & PACKAGING

UN number 2924

| | | | |
|--------|----------|--------|---|
| ADR | Class: 3 | PG: II | Label: 3 (8) |
| RID | Class: 3 | PG: II | Label: 3 (8) |
| IMDG | Class: 3 | PG: II | Label: 3 (8) |
| IATA_C | Class: 3 | PG: II | Packing instruction (cargo aircraft): 363 |
| IATA_P | Class: 3 | PG: II | Packing instruction (passenger aircraft): 352 |

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.

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Packaging

Glass bottles of 500 and 1,000 ml. Steel bottles with volumes of 7.4, 27, 127 or 450 l. For safety reasons these are filled to a maximum of 90 %. Steel drums up to 200 l net.

OTHER INFORMATION

| | |
|---------------------------|----------------------------|
| Further Related Documents | Safety Data Sheet |
| Our brochure(s) | Lithium & Magnesium Amides |

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