

## TECHNICAL DATA SHEET

Date of Issue: 2025/02/24

# Lanthanum Chloride Lithium Chloride Complex, typ. 15 % solution in THF (typ. 0.6 M)

|                   |                              |
|-------------------|------------------------------|
| CAS-No.           | 10099-58-8                   |
| EC-No.            | 233-237-5                    |
| REACH No.         | 01-2119452063-49             |
| Molecular formula | LaCl <sub>3</sub>            |
| Product number    | 10000305, 10007286, 10007569 |

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**APPLICATION** Soluble anhydrous lanthanoid compositions for selective alkylations.

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### SPECIFICATION

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|             |                   |               |
|-------------|-------------------|---------------|
| Composition | LaCl <sub>3</sub> | 13.0 -17.0 %  |
|             | LiCl              | 3.2 - 7.2 %   |
|             | H <sub>2</sub> O  | max.500 mg/kg |

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### METHOD OF ANALYSIS

LaCl<sub>3</sub> determined over La by ICP analysis. LiCl determined over Li by FES analysis. The water content is determined by Karl-Fischer Titration. Detailed description available on request.

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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.com](http://www.albemarle.com).

Please contact us at [www.albemarle.com/contact](http://www.albemarle.com/contact) with questions.



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## PHYSICAL PROPERTIES

|                                |   |
|--------------------------------|---|
| Appearance                     | liquid  |
| Color                          | colorless to yellow   |
| Crystallization temperature    | < -10 °C  |
| Flash point                    | -21.2 °C 1,013 hPa (Tetrahydrofuran)  |
| Boiling point/boiling range    | 65 °C at 1,013 hPa (Tetrahydrofuran)  |
| Density                        | ca. 1.05 g/cm <sup>3</sup> at 25 °C   |
| Molecular weight               | 245.26 g/mol  |
| Thermal Stability              | Crystallization below -10 °C  |
| Additional Physical Properties | Molecular weight:      LaCl <sub>3</sub> 245.26 g/mol                      LiCl 42.39 g/mol |

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## HANDLING & STORAGE

|          |   |
|----------|---|
| Handling | Product is hygroscopic and should be handled in closed apparatus under inert gas. 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. Flash-back possible over considerable distance. Use only explosion-proof equipment. Take measures against electrostatic discharges. Protect from heat. Never add oxidizing materials to the product. Pay attention to the safety data sheet (see also: "Transport regulations" and "GHS Hazard Pictograms"). |
| Storage  | Store in well ventilated areas in tightly closed containers. May crystallize below -10°C.<br>When stored according to SDS the material is fairly stable. We still recommend to retest the material 6 month after date of analysis if included on CoA. If not included, use the date of manufacturing for the calculation.   |

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## TRANSPORT & PACKAGING

UN number 2056

|        |          |        |   |
|--------|----------|--------|---|
| ADR    | Class: 3 | PG: II | Label: 3                                      |
| RID    | Class: 3 | PG: II | Label: 3                                      |
| IMDG   | Class: 3 | PG: II | Label: 3                                      |
| IATA_C | Class: 3 | PG: II | Packing instruction (cargo aircraft): 364     |
| IATA_P | Class: 3 | PG: II | Packing instruction (passenger aircraft): 353 |

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 1,000 mL. 60 and 200 L special coated steel drums.

## OTHER INFORMATION

Further Related Documents                      Safety Data Sheet

Our brochure(s)                                      Lanthanoid Compositions - A new synthetic tool for cc-coupling reactions

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