

TECHNICAL DATA SHEET

Date of Issue: 2016/12/12

Lithium Amide, milled

CAS-No. 7782-89-0

EC-No. 231-968-4

Molecular Formula LiNH_2

Product Number 401601

APPLICATION

Claisen condensation, Aldol condensation.
Alkylation of nitriles, ketones, amines, alkynes.
Synthesis of ethynyl compounds and antihistamines. Transesterification.
Catalyst for the anionic polymerization of acrylonitrile and methacrylonitrile.

FURTHER INGREDIENTS

Lithium hydride

CAS-No. 7580-67-8

EC-No. 231-484-3

SPECIFICATION

LiNH ₂	min. 94 %	typ. 97 %
LiH	max. 6 %	typ. 3 %

METHOD OF ANALYSIS

Determination by acidimetric titration. Detailed description on request.

PHYSICAL PROPERTIES

Appearance	fine powder
Color	white to gray
Melting point/ range	380 - 400 °C
Density	1.18 g/cm ³ at 20 °C

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.

Bulk density	600 kg/m ³
Water solubility	(Not applicable) (Contact with water liberates toxic gas.)
Solubility in other solvents	(practically insoluble)
Molecular weight	22.96 g/mol
Additional Physical Properties	Particle size: typ. 90 % < 0.4 mm

HANDLING & STORAGE

Handling	Lithium Amide should be handled under inert gas atmosphere. Avoid contact with eyes, skin and clothes as well as inhalation. Lithium Amide decomposes in contact with humidity. Pay also attention to the Safety Data Sheet.
Storage	Lithium Amide should be stored in tightly closed containers under exclusion of humidity at gentle temperatures. Keep away from heat, sparks and fire. Under exclusion of air and humidity, the material is fairly stable. We recommend a retest after a period of six months after receipt. Pay also attention to the Safety Data Sheet.

TRANSPORT & PACKAGING

UN number 1390

ADR	Class: 4.3	PG: II	Label: 4.3
RID	Class: 4.3	PG: II	Label: 4.3
IMDG	Class: 4.3	PG: II	Label: 4.3
IATA_C	Class: 4.3	PG: II	Packing instruction (cargo aircraft): 489
IATA_P	Class: 4.3	PG: II	Packing instruction (passenger aircraft): 483

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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

Inner packing: Standard packing is 10 kg Polyethylene (PE) bags. PE bags from 10 g to 2,000 g in cans are available on request.

Outer packing: Appropriate clamping ring steel drums

OTHER INFORMATION

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

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