

TECHNICAL DATA SHEET

Date of Issue: 2020/03/30

Lithium Nitrate, technical grade

CAS-No.	7790-69-4
EC-No.	232-218-9
REACH No.	01-2119968667-16-0000 01-2119968667-16-0001
Molecular formula	LiNO ₃
Product number	401143

APPLICATION

- strong oxidizing agent
- corrosion inhibitor, e.g. in absorption coolers
- additive in fire works

SPECIFICATION

LiNO ₃	min. 98.5 %
H ₂ O (200°C)	max. 0.5%
Fe ₂ O ₃	max. 0.005%
Chloride	max. 0.01%
Sulfate	max. 0.05%
Total base	max. 0.08%

PHYSICAL PROPERTIES

Appearance	Crystalline powder
Colour	colourless

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.



Melting point/range	ca. 255 °C at 1,013 hPa (Information taken from reference works and the literature.)
Flash point	(Not applicable)
Decomposition temperature	ca. 450 °C
Density	ca. 2.38 g/cm ³ at 20 °C
Bulk density	ca. 1,130 kg/m ³
Water solubility	1,020 g/l at 20 °C
Molecular weight	68.95 g/mol
Thermal Stability	onset of decomposition: 450 °C
Additional Physical Properties	Solution enthalpy: + 300 cal (18 °C)

HANDLING & STORAGE

Handling	Pay attention to the official safety regulations.
Storage	Store under dry conditions. Product is hygroscopic, tends to time consolidation and forms agglomerates under prolonged storage.

TRANSPORT & PACKAGING

UN number 2722

ADR	Class: 5.1	PG: III	Label: 5.1
RID	Class: 5.1	PG: III	Label: 5.1
IMDG	Class: 5.1	PG: III	Label: 5.1
IATA_C	Class: 5.1	PG: III	Packing instruction (cargo aircraft): 563
IATA_P	Class: 5.1	PG: III	Packing instruction (passenger aircraft): 559

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Hazard pictograms



Signal word	Warning
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

50kg polyethylene bag in fibre drum or 100kg polyethylene bag in fibre drum.

OTHER INFORMATION

Further Related Documents	Safety Data Sheet
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