

TECHNICAL DATA SHEET

Date of Issue: 2025/02/19

Lithium Perchlorate, pure

CAS-No.	7791-03-9
EC-No.	232-237-2
REACH No.	01-2120759714-45-0001
Molecular formula	LiClO ₄
Product number	10001417, 10001418

SPECIFICATION

LiClO ₄	min. 98.0%
Na	max. 0.01%
Ca	max. 0.005%
Heavy Metals (as Pb)	max. 0.005%
Cl	max. 0.005%
SO ₄	max. 0.005%
H ₂ O	max 2.0%
K	max. 0.01%
Fe	max. 0.005%

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.

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



PHYSICAL PROPERTIES

Appearance	Crystalline powder
Color	white
Melting point/range	236 °C
Boiling point/boiling range	(Decomposes below the boiling point.)
Density	2.428 g/cm ³ at 20 °C
Bulk density	1,400 kg/m ³
Water solubility	ca. 600 g/l at 25 °C
Molecular weight	106.39 g/mol
Grain Size	100 % < 1 mm
Thermal Stability	Decomposition temperature: abt. 430 °C

HANDLING & STORAGE

Handling	Product is hygroscopic! Observe official safety regulations (see also: "Transport regulations" and MSDS)
----------	----------------------------------------------------------------------------------------------------------

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.

TRANSPORT & PACKAGING

UN number 1481

ADR	Class: 5.1	PG: II	Label: 5.1
RID	Class: 5.1	PG: II	Label: 5.1
IMDG	Class: 5.1	PG: II	Label: 5.1
IATA_C	Class: 5.1	PG: II	Packing instruction (cargo aircraft): 562
IATA_P	Class: 5.1	PG: II	Packing instruction (passenger aircraft): 558

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

Poly bottles. 20 kg in PE bags in steel drums.

OTHER INFORMATION

Further Related Safety Data Sheet
Documents

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.

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