

TECHNICAL DATA SHEET

Date of Issue: 2016/12/05

Lithium Sulfide, pure grade

CAS-No.	12136-58-2
EC-No.	235-228-1
REACH No.	01-2120119137-63
Molecular Formula	Li ₂ S
Product Number	408622

APPLICATION

Li₂S is a product specially designed for the use in high performance batteries which can be either applied as electrode material or as precursor for solid electrolytes.
Patent list: - patent: DE 10 2012 208 982 A1

PURITY

pure

SPECIFICATION

aspect	Specification	Method of Analysis
assay Li ₂ S	min. 99.9 %	trace metal basis
Na	max. 40 ppm	FES
K	max. 20 ppm	FES
Ca	max. 20 ppm	ICP-OES
Trace impurities	max. Σ 200 ppm	
Phase purity *	phase pure	XRD

*measured at our laboratories in Frankfurt/Germany

PHYSICAL PROPERTIES

Appearance	powder
Color	colorless

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	> 1,200 °C
Density	1.64 g/cm ³
Water solubility	(Not applicable) (Contact with water liberates toxic gas.)
Molecular weight	45.95 g/mol

HANDLING & STORAGE

Handling	The product must be handled in dry, inert atmosphere. Use of personal protective equipment.
Storage	Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from moisture. Recommended storage temperature: -10 to 40 °C

TRANSPORT & PACKAGING

UN number 2923

ADR	Class: 8	PG: II	Label: 8 (6.1)
RID	Class: 8	PG: II	Label: 8 (6.1)
IMDG	Class: 8	PG: II	Label: 8 (6.1)
IATA_C	Class: 8	PG: II	Packing instruction (cargo aircraft): 863
IATA_P	Class: 8	PG: II	Packing instruction (passenger aircraft): 859

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

Product at 0.5 kg in 1 l aluminium bottles.

OTHER INFORMATION

Further Related Documents Safety Data Sheet

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