TECHNICAL DATA SHEET

Date of Issue: 2018/03/02

Lithium bis-(oxalato)borate - LiBOB (abg), advanced battery grade

CAS-No. 244761-29-3

EC-No. 456-990-3

REACH No. 01-0000019322-77

Molecular Formula C₄BO₃Li

Product Number 408507

APPLICATION

LiBOB is a proprietary* conductive agent for the use in high performance Lithium Batteries, Lithium Ion Batteries and Lithium Polymer Batteries. This halide-free product may be used instead of traditional fluorinated compounds like LiPF6, LiBF4, Li-triflate, methanides, imides etc. or as an additive to these classical electrolyte salts.

*Extracted patents list

DE19829030C; US6506516; EP1091963B; KR716373B1; CA2336323C; JP3913474B2

US7208131B; CN1329401C; DE10108608C2; EP1377592B1; JP4190887B2; TWI324606B;

US7674911B2

EP1483802B1; CN100446334C;

CN101796057B; EP2185569B1; JP5506671B2

SPECIFICATION

Aspect	guaranteed		
assay	min. 97.4 %	typ. 99.5 %	
water	max. 0.03 %	typ. 0.01 %	
insolubles	max. 2.50 %	typ. 0.5 %	

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Ca	max. 10 mg/kg	typ. <2 mg/kg	
Fe	max. 10 mg/kg	typ. <2 mg/kg	
Na	max. 20 mg/kg	typ. <2 mg/kg	
CI	max. 20 mg/kg	typ. <2 mg/kg	_

PHYSICAL PROPERTIES

Appearance fine powder

Color colorless

Decomposition temperature

> 290 °C (Decomposes before melting.)

Density 1.778 g/cm3 at 20 °C Method: OECD Test Guideline 109

Bulk density 800 - 1,200 kg/m3

Water solubility ca. 350 g/L (hydrolyzes)

Solubility in other

solvents

ca. 500 g/L at 20 °C Medium: Tetrahydrofuran

ca. 170 g/L at 25 °C Medium: propylene carbonate (Good solubility in carbonate

mixtures, carboxylic esters, glymes, ketones, lactones.)

Molecular weight 193.79 g/mol

Thermal Stability decomposition > 290 °C (TGA experiment); hygroscopic; decomposes slowly on

contact with water.

HANDLING & STORAGE

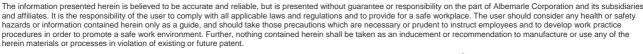
Handling The product should be handled in dry atmosphere.

Storage Storage for prolonged time requires a tightly closed container.

TRANSPORT & PACKAGING

ADR

Not regulated as a dangerous good





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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

- Samples in aluminium bottles and/or aluthene bags

- Steel drums, aluthene bags with PE bags inside

OTHER INFORMATION

Further Related Documents

Safety Data Sheet

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