TECHNICAL DATA SHEET

Date of Issue: 2017/09/07

iso-Butyllithium, typ. 16 % solution in Heptane (typ. 1.7 M)

CAS-No. 920-36-5

EC-No. 440-620-2

REACH No. 01-0000018484-66

Molecular Formula C₄H₉Li

Product Number 401827

APPLICATION Alkylating and metalating agent.

FURTHER INGREDIENTS

Heptane

CAS-No. 64742-49-0 EC-No. 927-510-4

SPECIFICATION

iso-Butyllithium: 15 - 17 %

PHYSICAL PROPERTIES

Appearance liquid

Color colorless to slightly yellow clear cloudy

Melting point/ range < -20 °C (Heptane)

Flash point < 0 °C (Heptane)

Boiling point/boiling

range

83 - 105 °C (Heptane)

Density ca. 0.7 g/cm3 at 20 °C

Water solubility (Not applicable)

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.



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Molecular weight 64.06 g/mol

Additional Physical Properties

Decomposition rate:

at 0 $^{\circ}$ C abt. 0.02 % loss of active base / day at 23 $^{\circ}$ C abt. 0.1 % loss of active base / day at 35 $^{\circ}$ C abt. 0.15 % loss of active base / day

HANDLING & STORAGE

Handling Under exclusion of air and humidity and when stored in a cool place, the solutions

are fairly stable. Iso-Butyllithium should be handled always under inert gas like nitrogen although hydrocarbon solutions of iso-Butyllithium in concentrations up to abt. 18 % normally do not ignite spontaneously when coming in contact with air. Increase in concentration due to evaporation of solvent results in rising danger of self-ignition. Iso-Butyllithium solutions after longer storage however have formed finely dispersed LiH and will nearly always ignite when coming in contact with air. Pay attention to official safety regulations (see also: "Transport regulations" and

'Marking').

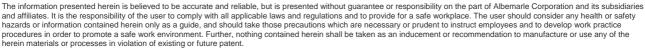
Storage For quality reasons iso-Butyllithium should be stored below 0 °C. Decomposition

does not cause appreciable pressure build up in containers.

TRANSPORT & PACKAGING

UN number 3394

ADR	Class: 4.2	PG: I	Label: 4.2 (4.3)
RID	Class: 4.2	PG: I	Label: 4.2 (4.3)
IMDG	Class: 4.2	PG: I	Label: 4.2 (4.3)
IATA_C	Class: 4.2		
IATA_P	Class: 4.2		





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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

Glass bottles of 100, 250, 500 and 1,000 ml. Steel bottles with volumes of 7.4, 27, 127 or 450 l. For safety reasons these are filled to a maximum of 90 %.

OTHER INFORMATION

Further Related

Safety Data Sheet

Documents

Our brochure(s) Organolithium Compounds, Butyllithium

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