

# TECHNICAL DATA SHEET

Date of Issue: 2017/08/08

## n-Butyllithium, typ. 20 % solution in Cyclohexane (2.3 M)

CAS-No.	109-72-8
EC-No.	203-698-7
REACH No.	01-2119494906-21
Molecular Formula	C <sub>4</sub> H <sub>9</sub> Li
Product Number	401812

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**APPLICATION** Initiator for olefin polymerization. Alkylating and metalating agent.

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### FURTHER INGREDIENTS

Cyclohexane

CAS-No. 110-82-7

EC-No. 203-806-2

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Hexane

CAS-No. 64742-49-0

EC-No. 925-292-5

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### SPECIFICATION

Chemical analysis:

active base 19.8 - 20.2 % (2.3 M)

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free base \*) max. 0.4 %

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activity min. 98 %

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Cl (covalent) max. 0.04 %

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\*) mainly LiOC<sub>4</sub>H<sub>9</sub>

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### PHYSICAL PROPERTIES

Appearance liquid

Color clear yellow

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Technical data sheets may change frequently. You can download the latest version from our website [www.albemarle-lithium.com](http://www.albemarle-lithium.com). Please contact us at [www.albemarle-lithium.com/contact](http://www.albemarle-lithium.com/contact) with questions.

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Viscosity, kinematic	(not determined)
Flash point	< -22 °C (Cyclohexane)
Boiling point/boiling range	ca. 68 °C (Cyclohexane)
Density	0.75 g/cm <sup>3</sup> at 20 °C
Water solubility	(Not applicable)
Molecular weight	64.06 g/mol

## HANDLING & STORAGE

**Handling** Under exclusion of air and humidity the solution is fairly stable (decomposition rate at 20 °C: abt. 0.06 %; at 35 °C: abt. 0.5 % of active material per month). Decomposition does not cause pressure build up in containers. Butyllithium should always be handled under inert gas like nitrogen although hydrocarbon solutions of n-butyllithium in concentrations of LiR up to about 25 % normally do not ignite spontaneously when coming in contact with air. Increase in concentration due to evaporation of solvent results in rising danger of selfignition.

**Storage** After longer storage, solution of Butyllithium tend to form finely dispersed LiH which is very likely to ignite when in contact with air. Pay attention to official safety regulations (see also "Transport regulations" and "GHS Hazard Pictograms", especially fire fighting). Please ask for our Butyllithium brochure.

## 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&amp;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

	nominal content	net content 1)
Railway tank	35 m3	30.4 m3
Isocontainer	16.6 - 20.5 m3	14.4 - 17.8 m3
Steel container	2.5 m3	2.25 m3
Steel container	450 l	405 l
Steel container	127 l	114 l
Steel container	27 l	24 l
Steel container	7.4 l	6.6 l

1) for safety reasons, max. 90 % or 87 % of nominal content

100, 250, 500 and 1,000 ml glass bottles with screw cap and with or without penetration disc-seal. Solutions are shipped under nitrogen blanket.

## OTHER INFORMATION

## Further Related

Safety Data Sheet

## Documents

## Our brochure(s)

Organolithium Compounds, Butyllithium

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