TECHNICAL DATA SHEET

Date of Issue: 2017/08/08

n-Butyllithium, typ. 15 % solution in Hexane (1.6 M)

CAS-No.	109-72-8
EC-No.	203-698-7
REACH No.	01-2119494906-21
Molecular Formula	C_4H_9Li
Product Number	401802

APPLICATION

Initiator for olefin polymerization. Alkylating and metalating agent.

FURTHER INGREDIENTS

Hexane

CAS-No.	64742-49-0
EC-No.	925-292-5

SPECIFICATION

Chemical analysis:	
active base	14.75 - 15.25 % (1.6 M)
free base	max. 0.3 %
activity	min. 98 %
Cl (covalent)	max. 0.03 %

*) mainly LiOC4H9

PHYSICAL PROPERTIES

Appearance	liquid
Color	yellow

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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Flash point	< -20 °C (Hexane)
Boiling point/boiling range	55 - 85 °C (Hexane)
Density	ca. 0.68 g/cm3 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&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 Documents	Safety Data Sheet
Our brochure(s)	Organolithium Compounds, Butyllithium

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