



***n*-Butyllithium in Hexane (Minimum 85% Active Solution)**

CAS No. 109-72-8

QS-PDS-036 Revision: 03

Date of Last Revision: July 7, 2022

Formula: $\text{CH}_3\text{CH}_2\text{CH}_2\text{CH}_2\text{-Li}$

Appearance: Light yellow to dark amber, clear to cloudy.

Application: Deprotonation and metal–halogen exchange reactions; synthesis of solution styrene butadiene rubber and of styrenic thermoplastic elastomers. Also used for synthesis of chemical intermediates.

Product Specifications:	<i>n</i> -Butyllithium, wt. %	85.0 min
	Carbon Bound Lithium, wt. %	97 min

**This product can be made to agreed upon customer specifications.*

Other Data:	Solvent	Hexane
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Physical Properties:	Molecular Weight	64.06
	Contained Butyllithium	646 g/L (5.39 lb/gal)
	Pyrophoricity	Pyrophoric
	Density @ 20°C	0.76 g/mL (6.34 lb/gal)

Solubility: *n*-Butyllithium is miscible in all proportions with aliphatic, aromatic, and ethereal solvents; however, there is some reactivity with the latter two solvent types.

Thermal Stability: At 25°C and 35°C, the average decomposition rates were 0.011 and 0.102 wt. % per day, respectively. Recommended storage: 10°C or lower and preferably at 0°C.

Toxicity / Safety Data / Handling / Storage / Disposal: *Information on toxicity, safety, handling, storage and disposal is contained in the Safety Data Sheet (SDS) for this product.*

Shipping Containers:	Bulk Containers	2,000 – 22,000 L (35,000 also available in EU only)
	Cylinders	#20 – 440 L



Glass Bottles 125 mL, 500 mL, 1L

Shipping Limitations: Shipments of NBL are described as "ORGANOMETALLIC SUBSTANCE, LIQUID, PYROPHORIC, WATER-REACTIVE (N-BUTYLLITHIUM, HYDROCARBON SOLUTION), 4.2 (4.3), UN 3394, PG I". Shipments require "Spontaneously Combustible" and "Dangerous When Wet" labels.

Post, Parcel, Air	Not acceptable	
Sea	Class 4.2 (4.3)	(IMDG)
Road, Rail (USA)	Class 4.2 (4.3)	(DOT)
Road, Rail (EU)	Class 4.2 (4.3)	(RID/ADR)