



n-Butyllithium, 24% in Heptane

CAS No. 109-72-8

QS-PDS-039 Revision: 06

Date of Last Revision: June 12, 2024

Formula: C_4H_9Li

Appearance: Clear, yellowish solution

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. %	23.5 min	24.25 max
	Carbon Bound Lithium, wt. %	98	min

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

Other Data:	Solvent	Heptane
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Physical Properties:	Molecular Weight	64.06
	Contained Butyllithium	168.5 g/L (1.41 lb/gal)
	Pyrophoricity	Pyrophoric
	Density @ 25°C	0.702 g/CC (5.86 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 20°C and 35°C, the average decomposition rates were 0.0015 wt. % per day and 0.01 wt. % per day, respectively. Recommended storage: 20°C or lower and preferably at less than 10°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)