

n-Hexyllithium, 33% in Hexane

QS-PDS-019 Revision: 07

CAS No. 21369-64-2

Date of Last Revision: June 12, 2024

Formula:				
Formula.	CH ₃ (CH ₂) ₅ -Li			
Appearance:	Clear, colourless to red solution.			
Application:	<i>n</i> -Hexyllithium is a non-pyrophoric strong base, primarily used in organic synthesis in deprotonation reactions and as a lithiation reagent. The advantage of this reagent is that the by-product of a deprotonation reaction is n-hexanes. <i>n</i> -Hexane is less volatile and has a higher flash point than the <i>n</i> -butane generated from a deprotonation with <i>n</i> -butyllithium. 1) <i>The Chemistry of Organolithium Compounds</i> ; Pergamon: Oxford, 1974 ; 2) <i>Organolithium Methods</i> ; Academic Press: London, 1988 .			
Product Specifications:	<i>n</i> -Hexyllithium, wt. % Free Alkalinity, wt. %		32.0 min 1.0	34.0 max max
	*This product can be made to agreed upon customer specifications.			
Other Data:	Solvent		Commercial Hexanes	
Physical Properties:	Molecular Weight Contained Hexyllithium Pyrophoricity Density @ 25°C		92.11 232.7 g/L (1.94 lb/gal) Non-pyrophoric 0.712 g/mL (0.594 lb/gal)	
Solubility:	<i>n</i> -Hexyllithium 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, the average decomposition rate is <0.002 wt. % per day. Recommended storage: 20°C or lower.			
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 Cylinders Glass Bottles	2,000 – 20, #5 – 420 L 125 mL 500	000 L) mL, and 1 L	



Shipments of NHL are described as "Corrosive Liquid, Flammable, Shipping Limitations: N.O.S., (HEXYLLITHIUM IN HEXANES), 8 (3), UN2920, PG I." Shipments require "Corrosive" and "Flammable Liquid" labels.

Not acceptable			
Class 8 (3)	(IMDG)		
Class 8 (3)	(DOT)		
Class 8 (3)	(RID/ADR)		
Class 8 (3)	(IATA)		
1.0 L maximum per inner glass container.			
2.5 L maximum per single/outer containe			
	Class 8 (3) Class 8 (3) Class 8 (3) Class 8 (3) 1.0 L maximum pe		

Cargo aircraft only.

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