

Johnson Matthey



*Chemistry*

MATERIAL SAFETY DATA SHEET

Johnson Matthey Catalog Chemicals  
Aesar Group/Alfa Products  
152 Andover Street  
Danvers, MA 01923  
Emergency Phone-(508) 777-1970

SECTION 1-IDENTIFICATION

Product Code: 44109 Revision Date: 4\11\88  
Product Name: n-Butyllithium, 22% in n-hexane.  
Synonyms: None  
Chemical Family: Organo-metallic hydrocarbon solution  
CAS#: 109-72-8  
Molecular Formula: C4H9Li in C6H14

SECTION 2-INGREDIENTS

Chemical:	%	PEL	TLW
n-Butyllithium	22%	None	None
CAS#			
109-72-8			

Chemical:	%	PEL	TLV
n-hexane	78%	50ppm	50ppm
CAS#			
11-54-3			

SECTION 3- PHYSICAL DATA

Boiling Point: No data  
% Volatiles: 78%  
Solubility in Water : Reacts  
Specific Gravity (H2O=1): No data  
Freezing/Melting Point: No data  
Evaporation Rate (butyl acetate=1): No data  
Vapor Density (air=1): 3  
Vapor Pressure : @ 60oF 100  
Appearance and Odor: Colorless to pale yellow liquid.  
Other: (n-hexane) Flash point -9.4oF, autoignition temp 437oF, bp69oC

SECTION 4-FIRE AND EXPLOSION HAZARD DATA

Flash Point:(oF) 7oTCC  
Flammable Limits in Air, % by volume: Lower 1.25  
Upper 6.9

Autoignition Temperature: No data  
Extinguishing Media: Do not use water or carbon dioxide. Use dry chemical extinguishing agents, dry sand or dry ground dolomite.  
Pyrophoric. Can catch fire on contact with air, or Co2

**Special Fire Fighting Procedures:** No special firefighting procedures needed, use normal procedures which include wearing NIOSH/MSHA approved self-contained breathing apparatus, flame and chemical resistant clothing, hats boots and gloves. If without risk remove material from fire area.

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**SECTION 5-HEALTH DATA**  
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OSHA (PEL): n-Hexane 500ppm  
ACGIH (TLV): n-Hexane 50 ppm

**A. ANIMAL TOXICITY**

LD50: No data  
LC50: No data  
Other: (n-Hexane)ihl-hmn TC10: 5000ppm\10m  
or l-rat LD50: 28710mg/kg

**B. EFFECTS OF EXPOSURE**

**ACUTE EFFECTS**

Ingestion: Irritation to digestive tract.  
Skin Contact: Corrosive to skin.  
Eye Contact: Avoid contact, burning can result.  
Inhalation: Irritation of respiratory tract. n-Hexane may produce narcotic effects  
Medical Conditions, if any, Aggravated by the Chemical: None  
Other Health Hazards: No data  
Most Likely Routes of Entry: No data

**CHRONIC EFFECTS**

Ingestion: No data  
Skin Contact: No data  
Eye Contact: No data  
Inhalation: n-hexane may produce narcotic effects, peripheral nerve disorders  
Other: None known

**C. EMERGENCY AND FIRST AID PROCEDURES**

Ingestion: No data available but one should obtain medical attention.  
Skin Contact: Remove contaminated clothing, flood skin with large amounts of water. If irritation persists seek medical attention.  
Eye Contact: Immediately flush eyes, including under eyelids, with large amounts of water for at least 15 minutes. Call a physician.  
Inhalation: No specific information available, one should obtain medical attention.

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**SECTION 6-REACTIVITY**  
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Incompatibility: Air, H2O, CO2, dinitrogen tetraoxide, oxidizers.  
Hazardous Decomposition Products: CO, CO2, Li2O, butane

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Conditions to Avoid: Heat, sparks, flames.  
Stability: Stable  
Hazardous Polymerization: Will not occur  
Other: Stability affected by incompatibilities and heat.

SECTION 7-ENVIRONMENTAL INFORMATION

RCRA Code: D001  
TSCA Registered: Yes  
Spill and Leak Procedures: Wearing full protective clothing and respiratory protection (See Sect. VIII), eliminate all sources of ignition. Cover spill with dry sand of dry ground vermiculite, mix well and carefully transfer to a well marked container. Close container tightly. Submit or retain for disposal.  
Waste Disposal: Consult state, local or federal EPA regulations for proper disposal.

SECTION 8-PROTECTION INFORMATION

Ventilation Requirements: Should be used in a glove box under inert atmosphere.  
Respiratory Protection: Should use NIOSH/OSHA self contained breathin apparatus in emergency situation and if exposed to vapors use respirator with an organic cartridge.  
Protective Gloves: Rubber  
Eye/Face Protection: ANSI approved safety glasses.

SECTION 9-SPECIAL PRECAUTIONS

Handling and Storage: Keep container tightly closed. Store in a cool, dry, well-ventilated area. Wash thoroughly after use. Handle under inert atmosphere.  
Other Precautions: Lab coat and apron, flame and chemical resistant coveralls, eyewash capable of sustained flushing, safety drench shower and hygienic facilities for washing.

SECTION 10-TRANSPORTATION INFORMATION-U.S. D.O.T.

Per 49CFR 172.101  
Proper Shipping Name: Pyrophoric Liquid N.O.S.  
Hazard Classification: Pyrophoric Liquid  
UN #: 2845

SECTION 11-COMMENTS

None

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the

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product not in conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.



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