MATERIAL SAFETY DATA SHEET

Johnson Matthey Catalog Chemicals
Aesar Group/Alfa Products
152 Andover Street
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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: n-Butyllithium
CAS#: 109-72-8
% 22%  PEL None

Chemical: n-hexane
CAS#: 11-54-3
% 78%  PEL 500ppm

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: @ 60°F 1.00
Appearance and Odor: Colorless to pale yellow liquid.
Other: (n-hexane) Flash point -9.4°F, autoignition temp 437°F,
bp590°C

SECTION 4-FIRE AND EXPLOSION HAZARD DATA

Flash Point:(°F) 70TCC
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.

SECTION 5-HEALTH DATA

OSHA (PEL): n-Hexane 500ppm
ACGIH (TLV): n-Hexane 50 ppm

A. ANIMAL TOXICITY

LD50: No data
LC50: No data
Other: (n-Hexane) inh-hmn TCi50: 5000ppm/10m
orl-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.

SECTION 6-REACTIVITY

Incompatibility: Air, H20, CO2, dinitrogen tetraoxide, oxidizers.
Hazardous Decomposition Products: CO, CO2, Li2O, butane
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 or dry or 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 breathing 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
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.