



MATERIAL SAFETY DATA SHEET

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SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MSDS Name: N-alpha-BOC-L-Lysine, 99%

Catalog Numbers:

30998-0000, 30998-0010

Synonyms:

N-alpha-(tert-Butoxycarbonyl)-L-lysine

Company Identification:

LEONID CHEMICALS
62/A-2 2nd Stage, Industrial Suburb
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SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS

| | | |
|----------------|---|----------------------|
| CAS # | : | 13734-28-6 |
| Chemical Name | : | N-alpha-BOC-L-Lysine |
| % | : | 99% |
| EINECS# | : | 237-303-4 |
| Hazard Symbols | : | None Listed. |
| Risk Phrases | : | None Listed. |

SECTION 3 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Not available.

Potential Health Effects

Eye:

May cause eye irritation.

Skin:

May cause skin irritation. May be harmful if absorbed through the skin.

Ingestion:

May cause irritation of the digestive tract. May be harmful if swallowed.

Inhalation:

May cause respiratory tract irritation. May be harmful if inhaled.



Chronic:
Not available.

SECTION 4 - FIRST AID MEASURES

Eyes:

Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

Skin:

Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

Ingestion:

Get medical aid. Wash mouth out with water.

Inhalation:

Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Notes to Physician:

Treat symptomatically and supportively.

SECTION 5 - FIRE FIGHTING MEASURES

General Information:

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.

Extinguishing Media:

Use water spray, dry chemical, carbon dioxide, or chemical foam.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:

Vacuum or sweep up material and place into a suitable disposal container. Avoid generating dusty conditions.

SECTION 7 - HANDLING AND STORAGE

Handling:

Avoid breathing dust, vapor, mist, or gas. Avoid contact with skin and eyes.

Storage:

Store in a tightly closed container. Store in a dry area. Keep refrigerated. (Store below 4°C/39°F.)

SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

Engineering Controls:

Use adequate ventilation to keep airborne concentrations low.

Personal Protective Equipment**Eyes:**

Wear chemical goggles.

Skin:

Wear appropriate protective gloves to prevent skin exposure.

Clothing:

Wear appropriate protective clothing to prevent skin exposure.

Respirators:

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

| | |
|---------------------------|--------------------|
| Physical State | : Powder |
| Color | : white |
| Odor | : Not available. |
| PH | : Not available. |
| Vapor Pressure | : Not available. |
| Viscosity | : Not available. |
| Boiling Point | : Not available. |
| Freezing/Melting Point | : 205 deg C (dec.) |
| Autoignition Temperature | : Not available. |
| Flash Point | : Not available. |
| Explosion Limits, lower | : Not available. |
| Explosion Limits, upper | : Not available. |
| Decomposition Temperature | NA |
| Solubility in water | NA |
| Specific Gravity/Density | NA |
| Molecular Formula | C11H22N2O4 |
| Molecular Weight | 246.31 |

SECTION 10 - STABILITY AND REACTIVITY

Chemical Stability:

Not available.

Conditions to Avoid:
Incompatible materials.

Incompatibilities with Other Materials:
Strong oxidizing agents.

Hazardous Decomposition Products:
Nitrogen oxides, carbon monoxide, carbon dioxide.

Hazardous Polymerization:
Has not been reported.

SECTION 11 - TOXICOLOGICAL INFORMATION

RTECS#:
CAS# 13734-28-6 unlisted.

LD50/LC50:
Not available.

Carcinogenicity:
N-alpha-BOC-L-Lysine -
Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.
See actual entry in RTECS for complete information.

SECTION 12 - ECOLOGICAL INFORMATION

NA

SECTION 13 - DISPOSAL CONSIDERATIONS

Dispose of in a manner consistent with federal, state, and local regulations.

SECTION 14 - TRANSPORT INFORMATION

IATA
No information available.

IMO
No information available.

RID/ADR
No information available.

SECTION 15 - REGULATORY INFORMATION

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: Not available.

Risk Phrases:

NA

Safety Phrases:

S 24/25 Avoid contact with skin and eyes.

WGK (Water Danger/Protection)

CAS# 13734-28-6: No information available.

United Kingdom Occupational Exposure Limits

United Kingdom Maximum Exposure Limits

Canada

None of the chemicals in this product are listed on the DSL/NDSL list.

CAS# 13734-28-6 is not listed on Canada's Ingredient Disclosure List.

Exposure Limits

US FEDERAL

TSCA

CAS# 13734-28-6 is not listed on the TSCA inventory.

It is for research and development use only.

SECTION 16 - ADDITIONAL INFORMATION

MSDS Creation Date: 11/13/1996 Revision #1 Date: 4/20/2000

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