

MATERIAL SAFETY DATA SHEET

CONTACT : LEONID CHEMICALS

Leonid Chemicals PVE Ltd 62/A-2 1st Stage, Yeshwanthpur Industrial Suburb Ashokpuram School Road Bangalore-560 022, Kamataka, INDIA Ph: +91-80-2337 8354, Fax: +91-80-2357 4827

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MSDS Name: N-ALPHA-CARBOBENZYLOXY-L-TRYPTOPHAN, 99%

Catalog Numbers:

30323-0000, 30323-0250

Synonyms:

Z-L-Tryptophan

Company Identification (Europe):

LEONID CHEMICALS

62/A-2 2nd Stage, Industrial Suburb Yeshwanthpur, Bangalore -22, INDIA

Ph- +91-80-23378354

SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS

CAS # : 7432-21-5

Chemical Name : N-ALPHA-CARBOBENZYLOXY-L-TRYPTOPHAN, 99%

% : 99% EINECS# : 231-

EINECS# : 231-074-4
Hazard Symbols : None Listed.
Risk Phrases : None Listed.

SECTION 3 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

The toxicological properties of this material have not been fully investigated.

Potential Health Effects

Eye:

May cause eye irritation.

Skin:

May cause skin irritation.

Ingestion:

The toxicological properties of this substance have not been fully investigated. May be harmful if swallowed.



Inhalation: May cause respiratory tract irritation. The toxicological properties of this substance have not been fully investigated.
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 immediately.
Skin: Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Remove 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: NA
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.

SECTION 7 - HANDLING AND STORAGE

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



Storage:

Store in a cool, dry place. Store in a tightly closed container.

SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

Engineering Controls:

Use adequate ventilation to keep airborne concentrations low.

Personal Protective Equipment

Eyes:

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

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

: white to off-white Color Odor : Not available. PH : Not available. Vapor Pressure : Not available. Viscosity : Not available. **Boiling Point** : Not available. Freezing/Melting Point : 121 - 127 deg C 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 NA
Molecular Weight : 338.37



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# 7432-21-5 unlisted.
LD50/LC50: Not available.
Carcinogenicity: N-ALPHA-CARBOBENZYLOXY-L-TRYPTOPHAN, 99% - 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.



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# 7432-21-5: 1

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# 7432-21-5 is not listed on Canada's Ingredient Disclosure List.

Exposure Limits

US FEDERAL

TSCA

CAS# 7432-21-5 is not listed on the TSCA inventory. It is for research and development use only.



SECTION 16 - ADDITIONAL INFORMATION

MSDS Creation Date: 11/12/1996 Revision #0 Date: Original.

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no way shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if the company has been advised of the possibility of such damages.

