



上海诺创生物科技有限公司

Shanghai ZNC Biotechnology Co., Ltd.

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Material Safety Data Sheet

L-Carnitine L-Tartrate

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MSDS Name: L- Carnitine L-Tartrate

Company Information: manufacturer

Shanghai ZNC biotechnology Co.,Ltd

Room 617, No 4-5, Lane 500, East Gaoke Rd,Pudong New Area, Shanghai
(201210), China

Tel:86-21-68453907 Fax:86-21-58356660

SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS

CAS#	Chemical Name	%
36687-82-8	L- Carnitine L-Tartrate	

SECTION 3 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Appearance: white.

The toxicological properties of this material have not been fully investigated. May cause eye and skin irritation.May cause respiratory and digestive tract irritation.

Target Organs: None known.

Potential Health Effects

Eye

Dust can cause eye irritation. Symptoms include stinging,tearing, redness, and swelling of eyes.

Skin

May cause mild skin irritation. Symptoms may include redness and burning of skin.

Ingestion:

May cause irritation of the digestive tract.

Inhalation:

Inhalation



This material is a dust or may produce dust. Breathing small amounts of this material is not likely to be harmful.

Chronic:

No information found.

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:

First aid is not normally required. However, it is recommended that exposed areas be cleaned by washing with soap and water.

Ingestion:

Give individual two glasses of milk or water to drink. If symptoms develop, seek medical attention.

Inhalation:

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

Notes to Physician:

No data

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. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Runoff from fire control or dilution water may cause pollution. Extinguishing Media: Use agent most appropriate to extinguish fire. In case of fire use water spray, dry chemical, carbon dioxide, or appropriate foam.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Small Spill

Sweep up material for disposal or recovery.

Large Spill

Shovel material into containers. Thoroughly sweep area of spill to clean up any residual material. Spills of this material are very slippery.



SECTION 7 - HANDLING and STORAGE

Handling

Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapor, liquid, and/or solid), all hazard precautions given in the data sheet must be observed. Use good personal hygiene practices. Wash hands before eating, drinking, smoking, or using toilet facilities. Promptly remove soiled clothing and wash before reuse. Shower after work using plenty of soap and water.

Storage

Store in a cool, dry place.

SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

Engineering Controls:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
L- Carnitine Tartrate	none listed	none listed	none listed

OSHA Vacated PELs:

L- Carnitine Tartrate:

No OSHA Vacated PELs are listed for this chemical.

Personal Protective Equipment

Eye Protection

Wear safety glasses in compliance with OSHA regulations. (Consult your safety representative.)

Skin Protection

Wear resistant gloves such as: latex.

Clothing:

Wear appropriate protective clothing to prevent skin exposure.

Respirators:

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

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES



Physical State:	Solid
Appearance:	white
Odor:	None reported.
pH:	Not available.
Vapor Pressure:	Not available.
Vapor Density:	Not available.
Evaporation Rate:	Not available.
Viscosity:	Not available.
Boiling Point:	Not available.
Autoignition Temperature:	Not applicable.
Flash Point:	Not applicable.
NFPA Rating:	(est.) Health: 1; Flammability: 0; Reactivity: 0
Explosion Limits, Lower:	Not available.
Upper:	Not available.
Decomposition Temperature:	
Specific Gravity/Density:	
Molecular Formula:	C ₁₈ H ₃₆ N ₂ O ₁₂
Molecular Weight:	472.0

SECTION 10 - STABILITY AND REACTIVITY

Chemical Stability:

Stable under normal temperatures and pressures.

Conditions to Avoid:

Incompatible materials

Incompatibilities with Other Materials:

No data

Hazardous Decomposition Products:

May form: carbon dioxide and carbon monoxide, nitrogen oxides.

Hazardous Polymerization: Has not been reported.

SECTION 11 - TOXICOLOGICAL INFORMATION

No data

SECTION 12 - ECOLOGICAL INFORMATION

No data



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SECTION 13 - DISPOSAL CONSIDERATIONS

Waste Management Information

Dispose of with other normal, solid waste

SECTION 14 - TRANSPORT INFORMATION

US DOT

No information available

Canadian TDG

No information available.

SECTION 15 - REGULATORY INFORMATION

US FEDERAL

US Federal Regulations

CERCLA RQ - 40 CFR 302.4(a)

None listed

CERCLA RQ - 40 CFR 302.4(b)

Materials without a "listed" RQ may be reportable as an "unlisted hazardous substance". See 40 CFR 302.5 (b).

SARA 302 Components - 40 CFR 355 Appendix A

None

Section 311/312 Hazard Class - 40 CFR 370.2

Immediate() Delayed() Fire() Reactive() Sudden
Release of Pressure()

SARA 313 Components - 40 CFR 372.65

None

International Regulations

Inventory Status

Not determined

State and Local Regulations

California Proposition 65

None



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SECTION 16 - ADDITIONAL INFORMATION

MSDS Creation Date: 10/12/2004

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.