

Material Safety Data Sheet

1. Identification of the substance/mixture

Product name: L-Carnitine (Slow-Release Granule)

Molecular Formula: $C_7H_{15}NO_3$

Molecular Weight: 161.2

CAS No.: 541-15-1

2. Hazards identification

Human health hazards: No harmful effects have been identified.

Inhalation: Not applicable at ambient temperature.

Skin contact: Unlikely to be irritant.

Eye contact: Can cause irritation.

Ingestion: Unlikely to be harmful unless excessive amounts are swallowed.

Physical-chemical hazards: None identified.

Environment hazards: None identified

3. information on ingredients

L-Carnitine PVP Hydroxy Propyl Methyl Cellulose Pullulan

4. First aid measures

Skin contact: Remove contaminated clothing. Wash with plenty of water and soap. Eye

contact: Rinse immediately with tap water for 10 minutes –open eyelids forcibly. Inhalation:

Remove the casualty to fresh air and keep him/her calm, consult physician. Note to physician:

Treat symptomatically.

5. Fire-fighting measures

Suitable extinguishing media: Water spray, Dry chemical, foam, CO₂.

Special hazards: As with any fine particulate matter, accumulation of excessive dust on overhead structures may produce explosive concentration when disturbed and dispersed.

Protection of fire-fighters: Precipitate gases/vapors/mists with water spray.

6. Accidental release measures

Person-related precautionary measures: Do not inhale vapors/aerosols. Environmental-protection measures: Do not allow to enter sewerage system. Procedures for cleaning / absorption: Absorb material in sand or other suitable absorbent and place in container. Clean up affected area.

7. Handling and storage

Handling:

Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Minimize dust generation and accumulation.

Storage:

Storage conditions: cool, protected from light, protected from humidity. Validity: 24 months at room temperature in the unopened original container, after opening the container, the contents should be used within a short period. Packaging materials: tightly closing, PE bag, cardboard drum, aluminum foil bag.

8. Exposure controls/personal protection

Personal protective equipment: Protective clothing should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled. The resistance of the protective clothing to chemicals should be ascertained with the respective supplier.

Respiratory protection: Required when vapors/aerosols are generated.

Eye protection: Required (safety glasses)

Hand protection: Use recommended Industrial

Hygiene: Wash hands after working with substance. Change contaminated clothing.

9. Physical and chemical properties

Form: Free flowing granule.

Colour: White to off-white free-flowing granule.

Odour: Characteristic.

Bulk density: $\geq 0.40\text{g/ml}$

Solubility: Soluble in cold water.

10. Stability and reactivity

Chemical stability: Stable under normal temperatures and pressures.

Conditions to avoid: High temperatures, incompatible materials, light, dust generation.

Incompatibilities with other materials: Moisture, strong oxidizing agents. Hazardous decomposition products: Nitrogen oxides, carbon monoxide, irritating and toxic fumes and gases, carbon dioxide.

Hazardous polymerization: Has not been reported.

11. Toxicological information

N.A.

12. Ecological information

Ecotoxic effects: Quantitative data on the ecological effect of this product are not available.



Address: East of Tianmu Road, Laiyang Development Zone, Yantai City, Shandong Province, 265200, China

Further ecologic data: No ecological problems are to be expected when the product is handled and used with due care and attention.

13. Disposal considerations

Product: There are no uniform regulations for the disposal of chemicals or residues. Chemical residues generally count as special waste. The disposal of the latter is regulated in the countries through corresponding laws and regulations. We recommend that you contact either the authorities in charge or approved waste disposal companies which will advise you on how to dispose of special waste.

Packaging: Disposal in compliance with official regulations. Handle contaminated packaging in the same way as the substance itself. If not officially specified differently, non-contaminated packaging may be treated like household waste or recycled.

14. Transport information

Not subject to transport regulations.

15. Regulatory information

Labeling: No labeling necessary for dangerous goods.

16. Other information

The information contained herein is based on the present state of our knowledge. It characterizes the product with regard to the appropriate safety precautions. It does not represent a guarantee of the properties of the product.