



SAFETY DATA SHEET

L-Carnitine — 600 mg

SDS Version 1.0 | Date Prepared: 2026-08-11

Section 1 — Product and Company Identification

Product Name	L-Carnitine — 600 mg
Chemical Name / Sequence	(R)-3-Carboxy-2-hydroxy-N,N,N-trimethyl-1-propanaminium hydroxide inner salt
Synonyms	Levocarnitine; L-Carnitine
Catalog / SKU	VRL-LCARN-600
Product Category	Research Compounds — Metabolic Research
Recommended Use	For laboratory research purposes only. Not intended for human or veterinary use.
Supplier	Valor Research Labs
Address	St. Augustine, FL 32080, United States
Website	https://valorresearchlabs.com
Email	support@valorresearchlabs.us
Emergency Phone	1-800-222-1222 (U.S. Poison Control Center, 24 hours)

Section 2 — Hazard Identification

GHS Classification: Not classified as hazardous under GHS Revision 3 on the basis of currently available data. Standard laboratory precautions for handling fine powders or liquids apply.

Signal Word: None

Pictogram: None required

Hazard Statements: No specific GHS hazard statements have been assigned. Dust or liquid may cause mechanical irritation of eyes, skin, or respiratory tract.

Precautionary Statements: P264 — Wash thoroughly after handling. P280 — Wear protective gloves, eye protection, and a laboratory coat. P305+P351+P338 — IF IN EYES: Rinse cautiously with water for several minutes. P302+P352 — IF ON SKIN: Wash with plenty of water.

Section 3 — Composition / Information on Ingredients

Component	L-Carnitine — 600 mg
CAS Number	541-15-1
Molecular Formula	C ₇ H ₁₅ NO ₃
Molecular Weight	≈ 161.2 g/mol
Purity	≥ 98%
Form / Appearance	White crystalline powder
Notes	Naturally occurring quaternary ammonium compound

Section 4 — First-Aid Measures

Inhalation: Move person to fresh air. If symptoms appear or persist, obtain medical attention.

Skin Contact: Remove contaminated clothing. Wash thoroughly with soap and water.

Eye Contact: Flush eyes with large amounts of water for at least 15 minutes. Obtain medical attention.

Ingestion: Rinse mouth. Do not induce vomiting. Contact Poison Control (1-800-222-1222).

Section 5 — Fire-Fighting Measures

Extinguishing Media: Water spray, dry chemical, CO₂, or alcohol-resistant foam.

Specific Hazards: Thermal decomposition may release carbon oxides, nitrogen oxides, and other fragments.

Firefighter Protection: Self-contained breathing apparatus and full protective gear.

Section 6 — Accidental Release Measures

Personal Precautions: Minimize dust/aerosol generation. Wear gloves, eye protection, lab coat.

Cleanup: Collect carefully into labeled container. Wipe residual with damp cloth. Ventilate area.

Section 7 — Handling and Storage

Handling: Handle in ventilated laboratory setting. Avoid dust creation. Do not eat, drink, or smoke while handling.

Storage: Lyophilized material at -20 °C, protected from light and moisture. After reconstitution store at 2–8 °C and use promptly.

Incompatible Materials: Strong oxidizers, strong acids, strong bases.

Section 8 — Exposure Controls / Personal Protection

Occupational Exposure Limits: No established OELs.

Engineering Controls: Chemical fume hood or equivalent local exhaust.

PPE: Nitrile gloves, safety glasses with side shields, laboratory coat. Dust mask if airborne particles possible.

Section 9 — Physical and Chemical Properties

Appearance	White crystalline powder
Physical State	Solid (lyophilized) or liquid (Bac Water)
Odor	Odorless or faint
Solubility	Soluble in water / bacteriostatic water (typical)
pH	Not applicable (solid) / near neutral (solutions)

Section 10 — Stability and Reactivity

Stability: Stable under recommended storage conditions (-20 °C, protected from light/moisture).

Conditions to Avoid: Excessive heat, moisture, strong light, repeated freeze-thaw cycles after reconstitution.

Hazardous Decomposition: Carbon oxides, nitrogen oxides under fire conditions.

Section 11 — Toxicological Information

Acute Toxicity: No formal LD50/LC50 data available. Handle with standard laboratory precautions.

Skin / Eye Irritation: May cause mild mechanical irritation.

Carcinogenicity / Mutagenicity / Reproductive Toxicity: No data available. Not listed by IARC, NTP, or OSHA.

Section 12 — Ecological Information

Ecotoxicity / Persistence / Bioaccumulation: No data available. Avoid release to the environment.

Section 13 — Disposal Considerations

Dispose of contents and container in accordance with local, regional, national, and international regulations. Do not dispose into sinks or drains. Consult licensed laboratory waste disposal service.

Section 14 — Transport Information

UN Number / Proper Shipping Name / Hazard Class: Not regulated for transport under current DOT, IATA, or IMDG criteria when shipped as non-hazardous research material in appropriate packaging.

Section 15 — Regulatory Information

- OSHA HCS 2012 compliant (29 CFR 1910.1200).
- Sold strictly for laboratory research use only.
- Not intended for human consumption, veterinary, food, or cosmetic use.
- SARA / Prop 65: Not listed.

Section 16 — Other Information

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Prepared By	Quality Assurance
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