

(L-Carnitine Base)

DATE PREPARED: 8/11/2015

Section 1. Product and Company Identification

Product Name L-Carnitine Base

541-15-1 **CAS Number**

Parchem - fine & specialty chemicals

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EMERGENCY RESPONSE NUMBER

CHEMTEL

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Collect Calls Accepted

Section 2. Hazards Identification

Classification of the substance or mixture **Regulation (EC) No. 1272/2008 (CLP)**

Skin Irritation Category 2 Eye Irritation Category 2

Directive 67/548/EEC & Directive 1999/45/EC

Xi Irritant

R36/38: Irritating to eyes and skin.

GHS Label Elements

Pictograms:



Signal word: WARNING

Hazard and precautionary statements **Hazard Statements**

H315: Causes skin irritation.

H319: Causes serious eye irritation

Precautionary Statements

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P302 + P352: IF ON SKIN: Wash with plenty of soap and water.

P304 + P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for

breathing.



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P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P405: Store locked up.

Label elements

According to Directive 67/548/EEC & Directive 1999/45/EC

Not applicable

Section 3. Composition / Information on Ingredients

Common Name L-Carnitine Base

(R)-(3-carboxy-2-hydroxypropyl)trimethylammonium hydroxide Synonym(s)

CAS Number 541-15-1

COMPONENT	CAS NUMBER	CONCENTRATION
L-Carnitine Base	541-15-1	98% wt.

Section 4. First Aid Measures

Description of first aid measures

Inhalation: Obtain medical attention. Remove patient from exposure. Give oxygen if breathing difficult. Apply artificial respiration if necessary.

Skin Contact: Obtain medical attention. Remove contaminated clothing immediately and wash affected skin with water or soap and water.

Eye Contact: Obtain medical attention. If substance has got into the eyes, immediately wash out with plenty of water for at least 15 minutes.

Ingestion: Obtain immediate medical attention. If swallowed, rinse mouth with water (only if the person is conscious).

Most important symptoms and effects, both acute and delayed: Irritation, Coughing, Increased difficulty in breathing.

Indication of the immediate medical attention and special treatment needed: Increased difficulty in breathing.

Section 5. Firefighting Measures

Extinguishing media

Suitable Extinguishing Media: Extinguish with carbon dioxide, dry chemical, alcohol-resistant foam or water spray. As appropriate for surrounding fire.

Unsuitable Extinguishing Media: Do not use water jet.

Special hazards arising from the substance or mixture: Combustion or thermal decomposition will evolve toxic and irritant vapors. (Nitrogen oxides)

Advice for firefighters: Self-contained breathing apparatus to be worn if involved in fire. Water spray should be used to cool containers.





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Section 6. Accidental Release Measures

Personal precautions, protective equipment, and emergency procedures: Put on protective clothing. Avoid inhalation of dusts.

Environmental precautions: Do not allow to enter drains, sewers or watercourses.

Methods and material for containment and cleaning up: Vacuum or sweep up spilled material. Avoid generation of dust. Transfer to a lidded container for disposal or recovery. To be disposed of as hazardous waste.

Reference to other sections: See Section: 8 (Exposure controls / PPE) & 13 (Disposal)

Section 7. Handling and Storage

Precautions for safe handling: Avoid contact with skin and eyes. Avoid inhalation of dusts. Follow the principles of good occupational hygiene to control personal exposures.

Conditions for safe storage, including any incompatibilities: Keep container tightly closed, dry and in a cool well-ventilated place. Keep away from heat and sources of ignition.

Storage Temperature: Keep at a temperature not exceeding 25°C

Storage Life: Two Years

Incompatible materials: Strong oxidizing agents.

Other information: Avoid prolonged storage. Use as soon as possible.

Section 8. Exposure Controls / Personal Protection

Control parameters

Occupational Exposure Limits

LTEL (8 hr TWA mg/m³) LTEL (8 hr TWA mg/m³)

WEL: Workplace Exposure Limit (UK HSE EH40)

10 mg/m³ (Respirable Dust) 4 mg/m³ (Inhalable Dust)

Exposure controls

Appropriate engineering controls: Provide adequate ventilation, including appropriate local extraction, to ensure that the occupational exposure limit is not exceeded.

Personal protection equipment

Eye/face protection: Safety spectacles. Minimum standard EN166.

Skin protection (Hand protection/ Other): Plastic or rubber gloves. Minimum standard

EN374-3. Apron or other light protective clothing and boots.

Respiratory protection: Provide adequate ventilation, including appropriate local extraction. Where engineering controls are not fitted or inadequate wear suitable respiratory protective





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equipment. A suitable dust mask or dust respirator with filter type P (EN143 or EN405) may be appropriate.

Other: General hygiene measures for the handling of chemicals are applicable.

Environmental Exposure Controls: Do not allow to enter drains, sewers, or watercourses

Section 9. Physical and Chemical Properties

Appearance: Crystalline.

Color: White.

Odor: Not available.

Odor Threshold: (ppm) Not available pH (5% Solution in water): 5 - 9

Melting/Freezing Point: 188°C (Calculated)

Boiling Point/Range: Not available. **Flash Point (Closed cup):** Not applicable.

Evaporation rate (Butyl acetate = 1): Not applicable.

Explosive limit ranges: Not applicable.

Vapor Pressure (Pa): 1.4*10⁻⁸ Pa at 25°C (Calculated)

Vapor Density (Air=1): Not applicable.

Density: 0.64 g/mL at 20°C **Solubility (Water):** Very soluble. **Solubility (Other):** Soluble in: Ethanol

Partition Coefficient (n-Octanol/water): Log Pow = -5.48 (Calculated)

Auto Ignition Temperature: Not applicable.

Decomposition Temperature: > 355°C

Viscosity (mPa*s): Not applicable.

Explosive properties: Not explosive.

Oxidizing properties: Not oxidizing

Section 10. Stability and Reactivity

Reactivity: This product is hygroscopic.

Chemical stability: Stable under normal conditions. **Possibility of hazardous reactions:** None known.

Conditions to avoid: Protect from moisture.

Incompatible materials: Strong oxidizing agents.

Hazardous Decomposition Products: Nitrogen oxides

Section 11. Toxicological Information

Acute toxicity

Ingestion LD50: > 5000 mg/kg (rat)

Inhalation (4 hrs): No information available



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Skin Contact: No information available.

Skin corrosion/irritation: Dust may cause irritation.

Serious eye damage/irritation: Dust may have irritant effect on eyes. **Respiratory or skin sensitization:** It is not a skin sensitizer. (Calculated)

Mutagenicity: There is no evidence of mutagenic potential.

Carcinogenicity: No evidence of carcinogenicity.

Reproductive toxicity: No evidence of reproductive toxicity.

STOT-single exposure

Inhalation: Dust is irritant to the respiratory tract. Coughing

Ingestion: Low oral toxicity, but ingestion may cause irritation of the gastrointestinal tract.

STOT-repeated exposure: No known long term hazards are associated with the use of this

material.

Section 12. Ecological Information

Toxicity

Fish (96hrs): No information available.

Daphnia magna (48hrs): No information available.

Algae (72hrs): EC50: 1042 mg/l (Selenastrum) (Calculated)

Persistence and degradability: Readily biodegradable.

Bioaccumulative potential (96 hrs): The product has no potential for bioaccumulation.

Mobility in soil: The substance is predicted to have high mobility in soil. **Results of PBT and vPvB assessment:** Not classified as PBT or vPvB.

Section 13. Disposal Considerations

Waste Treatment Methods: Dispose of product and contaminated packaging in accordance with all local, state, and federal environmental control regulations.

Section 14. Transport Information

Land transport (ADR/RID): Not classified as dangerous for transport.

Sea transport (IMDG): Not classified as dangerous for transport.

EmS: F-A, S-B

Marine Pollutant: Not classified as a Marine Pollutant

Air transport (ICAO/IATA): Not classified as dangerous for transport.



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Section 15. Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture

EU regulations: Authorizations and/or restrictions on use: None anticipated

National regulations: None assigned

Chemical Safety Assessment: No Chemical Safety Assessment (CSA) has been carried out

Section 16. Other Information

Disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product.

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