

# PRODUCT INFORMATION



## Octanoyl-L-carnitine (chloride)

Item No. 26558

CAS Registry No.: 54377-02-5

Formal Name: (2R)-3-carboxy-N,N,N-trimethyl-2-[(1-oxooctyl)oxy]-1-propanaminium, monochloride

Synonyms: CAR 8:0, C8:0 Carnitine, L-Carnitine octanoyl ester, L-Octanoylcarnitine

MF:  $C_{15}H_{30}NO_4 \cdot Cl$

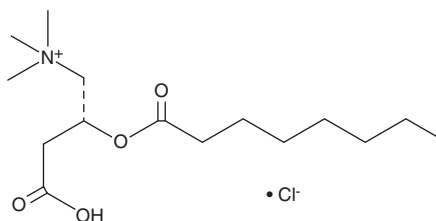
FW: 323.9

Purity:  $\geq 95\%$

Supplied as: A crystalline solid

Storage:  $-20^{\circ}C$

Stability:  $\geq 2$  years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

Octanoyl-L-carnitine (chloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the octanoyl-L-carnitine (chloride) in the solvent of choice, which should be purged with an inert gas. Octanoyl-L-carnitine (chloride) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of octanoyl-L-carnitine (chloride) in ethanol and DMF is approximately 20 mg/ml and approximately 10 mg/ml in DMSO.

### Description

Octanoyl-L-carnitine is a medium-chain acylcarnitine and the physiologically active form of octanoyl-DL-carnitine (Item No. 15048).<sup>1</sup> Plasma levels of octanoyl-L-carnitine are elevated in patients with end-stage renal disease on continuous ambulatory peritoneal dialysis (PD) compared with both patients on automated PD and healthy individuals.<sup>2</sup> Octanoyl-L-carnitine does not undergo hydrolysis in the blood or during sample preparation when used as a standard for the quantification of octanoylcarnitine.<sup>1</sup>

### References

1. Chace, D.H., DiPerna, J.C., Adam, B.W., *et al.* Errors caused by the use of D,L-octanoylcarnitine for blood-spot calibrators. *Clin. Chem.* **47**(4), 758-760 (2001).
2. Di Liberato, L., Arduini, A., Rossi, C., *et al.* L-Carnitine status in end-stage renal disease patients on automated peritoneal dialysis. *J. Nephrol.* **27**(6), 699-706 (2014).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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