

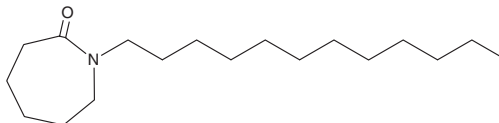
PRODUCT INFORMATION



Laurocapram

Item No. 46170

CAS Registry No.: 59227-89-3
Formal Name: 1-dodecylhexahydro-2H-azepin-2-one
MF: $C_{18}H_{35}NO$
FW: 281.5
Purity: $\geq 95\%$
Supplied as: A liquid
Storage: $-20^{\circ}C$
Stability: ≥ 4 years



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

Laboratory Procedures

Laurocapram is supplied as a liquid. A stock solution may be made by dissolving the laurocapram in the solvent of choice, which should be purged with an inert gas. Laurocapram is soluble (≥ 10 mg/ml) in ethanol.

Description

Laurocapram is a penetration enhancer.¹ It facilitates the absorption of lipophilic or hydrophilic molecules through the skin by increasing the fluidity of stratum corneum lipids, thereby enhancing diffusion. Laurocapram synergistically potentiates the activity of β -lactam and aminoglycoside antibiotics against methicillin-resistant *S. aureus* (MRSA) *in vitro*.² When applied topically with cefixime (Item No. 17176), the penetration-enhancing properties of laurocapram enable cefixime-mediated anti-inflammatory, antibacterial, and wound repair effects in a mouse model of MRSA-induced skin infection and anti-inflammatory and antibacterial effects in a mouse model of MRSA-induced pneumonia.

References

1. López-Cervantes, M., Márquez-Mejía, E., Cázares-Delgadillo, J., *et al.* Chemical enhancers for the absorption of substances through the skin: Laurocapram and its derivatives. *Drug Dev. Ind. Pharm.* **32**(3), 267-286 (2006).
2. Wang, N., Li, W., Yu, H., *et al.* Laurocapram, a transdermal enhancer, boosts cephalosporin's antibacterial activity against methicillin-resistant *Staphylococcus aureus*. *Biochem. Pharmacol.* **227**:116404, (2024).

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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