



Biological Source: Isol. from a marine bacterium
Biological Use/Importance: Cytotoxic agent
Optical Rotation: $[\alpha]_D^{22} +5.4$ (c, 1.03 in CH_2Cl_2)
UV: [neutral] λ_{max} 219 (); 274 (sh) () (MeOH) [neutral] λ_{max} 219 (); 274 () (MeOH) (Berdy)
Other Data: Isol. as a mixt. with Caprolactin A. Data given is for the mixt.

>>**Derivative:** N^3 -(7-Methyloctanoyl)
Synonym(s): Caprolactin A

CAS Registry Number: 151379-41-8

Molecular Formula: $\text{C}_{15}\text{H}_{28}\text{N}_2\text{O}_2$
Molecular Weight: 268.398
Accurate Mass: 268.215078
Percentage Composition: C 67.13%; H 10.51%; N 10.44%; O 11.92%
Biological Source: Isol. from a marine bacterium
Biological Use/Importance: Cytotoxic agent
UV: [neutral] λ_{max} 219 (); 274 () (MeOH) (Berdy)
Other Data: Isol. as a mixt. with Caprolactin B

>>**Variant:** ($\pm$)-form

CAS Registry Number: 17929-90-7
Molecular Formula: $\text{C}_6\text{H}_{12}\text{N}_2\text{O}$
Molecular Weight: 128.174
Accurate Mass: 128.094963
Percentage Composition: C 56.23%; H 9.44%; N 21.86%; O 12.48%
Physical Description: Cryst. (EtOAc)
Melting Point: Mp 68-71°. Mp 147-149°
Boiling Point: $\text{Bp}_{0.1}$ 105°
Sigma: A1041

>>**Derivative:** Hydrochloride

CAS Registry Number: 29426-64-0
Melting Point: Mp 294-296°

>>**Derivative:** Picrate

Physical Description: Needles (H_2O)
Melting Point: Mp 233 dec.°

>>**Derivative:** *N*-Ac

Molecular Formula: $\text{C}_8\text{H}_{14}\text{N}_2\text{O}_2$
Molecular Weight: 170.211
Accurate Mass: 170.105528
Percentage Composition: C 56.45%; H 8.29%; N 16.46%; O 18.80%
Physical Description: Cryst. (EtOAc)
Melting Point: Mp 160-162°

>>**Derivative:** *N*-Benzoyl

Molecular Formula: $\text{C}_{13}\text{H}_{16}\text{N}_2\text{O}_2$
Molecular Weight: 232.282
Accurate Mass: 232.121178
Percentage Composition: C 67.22%; H 6.94%; N 12.06%; O 13.78%
Physical Description: Cryst. (EtOH)
Melting Point: Mp 203-211°

References:

Pellegata, R. *et al.*, *Synthesis*, 1978, 614, (*synth*, *S*-form)
Boyle, W.J. *et al.*, *J.O.C.*, 1979, **44**, 4841, (*synth*)
Davidson, B.S. *et al.*, *Tetrahedron*, 1993, **49**, 6569-6574, (*Caprolactins*)
Uchikawa, J. *et al.*, *J. Het. Chem.*, 1994, **31**, 877, (*N*-Ac, *N*-benzoyl)