



Molecular Formula: C₁₂H₁₆N₂O₅
Molecular Weight: 268.269
Accurate Mass: 268.105923
Percentage Composition: C 53.73%; H 6.01%; N 10.44%; O 29.82%
Biological Source: From *Corynebacterium hydrocarboclastus* and *Nocardia paraffinica*
Use/Importance: Active against gram-positive and -negative bacteria
Physical Description: Needles (dichloroethane)
Melting Point: Mp 109.5-110.5°
Optical Rotation: [α]_D -27 (c, 0.75 in EtOAc)

>>Derivative: *N*-Propanoyl, *O*³-Ac
Synonym(s): Corynecin V

CAS Registry Number: 40958-12-1

Molecular Formula: C₁₄H₁₈N₂O₆
Molecular Weight: 310.306
Accurate Mass: 310.116488
Percentage Composition: C 54.19%; H 5.85%; N 9.03%; O 30.94%
Biological Source: From *Corynebacterium hydrocarboclastus*
Use/Importance: Active against gram-positive and -negative bacteria
Physical Description: Needles (Et₂O/petrol)
Melting Point: Mp 93-95°
Optical Rotation: [α]_D +3.4 (c, 0.53 in EtOAc)
Solubility: BERDY SOL: Sol. MeOH, Et₂O; poorly sol. H₂O

>>Derivative: *N*-(2-Methylpropanoyl)
Synonym(s): Corynecin III

CAS Registry Number: 18048-95-8

Molecular Formula: C₁₃H₁₈N₂O₅
Molecular Weight: 282.296
Accurate Mass: 282.121573
Percentage Composition: C 55.31%; H 6.43%; N 9.92%; O 28.34%
Biological Source: From *Corynebacterium hydrocarboclastus* and *Nocardia paraffinica*
Use/Importance: Active against gram-positive and -negative bacteria
Physical Description: Needles (dichloroethane)
Melting Point: Mp 131.5-133°
Optical Rotation: [α]_D -61 (c, 0.4 in EtOAc)
Solubility: BERDY SOL: Sol. MeOH, Et₂O; poorly sol. H₂O
UV: [neutral] $\lambda_{\max}$ 273 () (MeOH) (Berdy)

>>Derivative: *N*-(Dichloroacetyl)
see Chloramphenicol, [BDT71-Q](#)

>>Variant: (1*S*,2*S*)-form

CAS Registry Number: 2964-48-9
Molecular Formula: C₉H₁₂N₂O₄
Molecular Weight: 212.205
Accurate Mass: 212.079708
Percentage Composition: C 50.94%; H 5.70%; N 13.20%; O 30.16%
Melting Point: Mp 163-164°
Optical Rotation: [α]_D +28 (c, 0.2 in 1*M* HCl)

References:

Aldrich Library of FT-IR Spectra, 1st edn., 1985, **1**, 1344A, (*ir*)
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Suzuki, T. *et al.*, *Agric. Biol. Chem.*, 1972, **36**, 2223; 2229; 1974, **38**, 2183; 2471, (*isol, uv, ir, pmr, struct, manuf*)
Bhuta, P. *et al.*, *J. Med. Chem.*, 1980, **23**, 1299, (*uv, cd, props*)
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