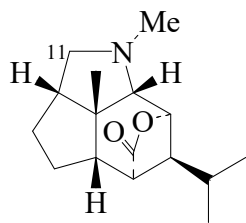




>>Entry Name: Dendrobine

Synonym(s): Dendroban-12-one, 9Cl



Molecular Formula: $C_{16}H_{25}NO_2$

Molecular Weight: 263.379

Accurate Mass: 263.188529

Percentage Composition: C 72.97%; H 9.57%; N 5.32%; O 12.15%

>>Variant: (-)-form

CAS Registry Number: 2115-91-5

Molecular Formula: $C_{16}H_{25}NO_2$

Molecular Weight: 263.379

Accurate Mass: 263.188529

Percentage Composition: C 72.97%; H 9.57%; N 5.32%; O 12.15%

Biological Source: Main alkaloid from *Dendrobium* spp., esp. *Dendrobium nobile* (Orchidaceae)

Physical Description: Cryst. (Et₂O)

Melting Point: Mp 134-136°

Optical Rotation: $[\alpha]_D^{14} -48.4$ (c, 1.89 in MeOH)

pKa Value: pK_a 7.8 (H₂O)

>>Derivative: N-Oxide

Synonym(s): Dendrobine N-oxide

CAS Registry Number: 40072-57-9

Molecular Formula: $C_{16}H_{25}NO_3$

Molecular Weight: 279.378

Accurate Mass: 279.183444

Percentage Composition: C 68.79%; H 9.02%; N 5.01%; O 17.18%

Biological Source: Alkaloid from *Dendrobium nobile* (Orchidaceae)

Physical Description: Needles + 1H₂O (Me₂CO/Et₂O)

Melting Point: Mp 160-180 dec.°

Optical Rotation: $[\alpha]_D^{23} -34$ (c, 0.27 in MeOH)

>>Derivative: N-Me

Synonym(s): N-Methyldendrobine

Molecular Formula: $C_{17}H_{28}NO_2^{(+)}$

Molecular Weight: 278.414

Accurate Mass: 278.212004

Percentage Composition: C 73.34%; H 10.14%; N 5.03%; O 11.49%

Biological Source: Quaternary alkaloid from *Dendrobium nobile* (Orchidaceae)

>>Derivative: N-Me, iodide

CAS Registry Number: 3847-26-5

Molecular Formula: $C_{17}H_{28}INO_2$

Molecular Weight: 405.318

Accurate Mass: 405.116477

Percentage Composition: C 50.38%; H 6.96%; I 31.31%; N 3.46%; O 7.89%

Physical Description: Prisms (Me₂CO), needles (Me₂CO/Et₂O)

Melting Point: Mp 235-238°. Mp 245-246°. Mp 253°

>>Derivative: N-Me, picrate

Physical Description: Prisms (MeOH)

Melting Point: Mp 241-243°