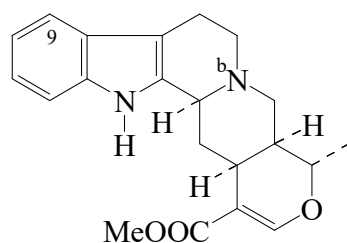




>>Entry Name: Tetrahydroalstonine



Absolute
Configuration

CAS Registry Number: 6474-90-4

Molecular Formula: $C_{21}H_{24}N_2O_3$

Molecular Weight: 352.432

Accurate Mass: 352.178693

Percentage Composition: C 71.57%; H 6.86%; N 7.95%; O 13.62%

Biological Source: Alkaloid from *Alstonia*, *Amsonia*, *Cabucala*, *Catharanthus*, *Mitragyna*, *Rauwolfia*, *Uncaria* and *Voacanga* spp. (Apocynaceae, Naucleaceae)

Physical Description: Lustrous plates (EtOH aq.)

Melting Point: Mp 230-231°

Optical Rotation: $[\alpha]_D^{27} -108$ (c, 0.5 in $CHCl_3$)

UV: [neutral] λ_{max} 226 (); 272 (); 283 (); 290 () (MeOH) (Berdy)

Sigma: T0783

>>Derivative: N^b -Oxide (*R*-)

Synonym(s): Tetrahydroalstonine (**4*R***)-*N*-oxide

CAS Registry Number: 41590-28-7

Molecular Formula: $C_{21}H_{24}N_2O_4$

Molecular Weight: 368.432

Accurate Mass: 368.173608

Percentage Composition: C 68.46%; H 6.57%; N 7.60%; O 17.37%

Biological Source: Alkaloid from *Uncaria* spp. (Naucleaceae)

Physical Description: Cryst. (Me_2CO/Et_2O)

Melting Point: Mp 172-174 dec.°

Optical Rotation: $[\alpha]_D^{20} +33.8$ (c, 0.11 in MeOH)

>>Derivative: N^b -Me

Synonym(s): Melinonine A. N^b -Methyltetrahydroalstonine

CAS Registry Number: 6801-41-8

Molecular Formula: $C_{22}H_{27}N_2O_3^{(+)}$

Molecular Weight: 367.467

Accurate Mass: 367.202168

Percentage Composition: C 71.91%; H 7.41%; N 7.62%; O 13.06%

Biological Source: Quaternary alkaloid from *Strychnos melinoniana* and *Rauwolfia volkensii* (Strychnaceae, Apocynaceae)

>>Derivative: N^b -Me, chloride

Molecular Formula: $C_{22}H_{27}ClN_2O_3$

Molecular Weight: 402.92

Accurate Mass: 402.17102

Percentage Composition: C 65.58%; H 6.75%; Cl 8.80%; N 6.95%; O 11.91%

Physical Description: Needles ($EtOH/Me_2CO$)

Melting Point: Mp 260-261°

Optical Rotation: $[\alpha]_D^{20} -120$ (H_2O)

Other Data: Hygroscopic

>>Derivative: N^b -Me, perchlorate

Molecular Formula: $C_{22}H_{27}ClN_2O_7$

Molecular Weight: 466.917

Accurate Mass: 466.15068

Percentage Composition: C 56.59%; H 5.83%; Cl 7.59%; N 6.00%; O 23.99%

Physical Description: Cryst. (H_2O)

Melting Point: Mp 299-300°

>>Derivative: 3-Epimer