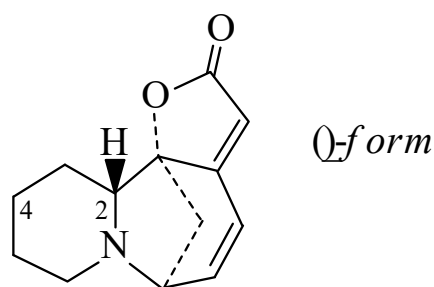




>>Entry Name: Securinine, INN
Synonym(s): Securinan-11-one, 9CI



Molecular Formula: C₁₃H₁₅NO₂
Molecular Weight: 217.267
Accurate Mass: 217.110279
Percentage Composition: C 71.87%; H 6.96%; N 6.45%; O 14.73%
Calculated Log P Data: Log P 0.21 (uncertain value) (calc)

>>Variant: (-)-form

CAS Registry Number: 5610-40-2

Molecular Formula: C₁₃H₁₅NO₂
Molecular Weight: 217.267
Accurate Mass: 217.110279
Percentage Composition: C 71.87%; H 6.96%; N 6.45%; O 14.73%

Biological Source: Alkaloid from the leaves, roots and stems of *Securinega suffruticosa* and *Phyllanthus discoides*, also isol. from *Securinega durissima*, *Securinega fluggeoides* and the bark of *Securidaca longepedunculata* (Euphorbiaceae, Leguminosae)

Use/Importance: Stereospecific GABA_A receptor antagonist. CNS stimulant with strychnine-like activity but lower toxicity, causes respiratory stimulation, increased muscle tone and hypotension

Physical Description: Yellow cryst. (EtOH)

Melting Point: Mp 142-143°

Optical Rotation: [α]_D²⁰ -1042 (c, 1.0 in EtOH)

pKa Value: pK_a 7.17

Hazard & Toxicity: LD₅₀ (mus, orl) 270 mg/kg

Sigma: S3138

>>Derivative: Hydrobromide

Physical Description: Pale-yellow needles + 2H₂O (Et₂O)

Melting Point: Mp 250 dec.° (dehydrating range 110-120°)

>>Derivative: Picrolonate

Melting Point: Mp 194° (208°)

>>Derivative: Methiodide

Melting Point: Mp 235-236 dec.°

Optical Rotation: [α]_D²⁰ -1953 (EtOH)

>>Derivative: 4-Hydroxy

Synonym(s): 4-Hydroxysecurinine

CAS Registry Number: 130969-00-5

Molecular Formula: C₁₃H₁₅NO₃
Molecular Weight: 233.266
Accurate Mass: 233.105194
Percentage Composition: C 66.94%; H 6.48%; N 6.00%; O 20.58%
Biological Source: Alkaloid from *Phyllanthus niruri* (Euphorbiaceae)
Physical Description: Gum

>>Derivative: Diastereoisomer

>>Derivative: 14,15-Dihydro