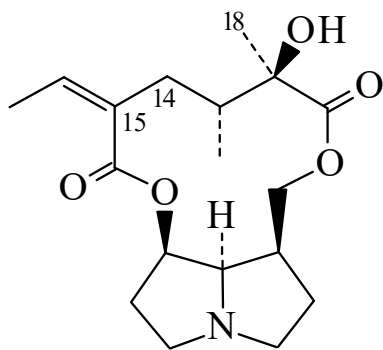




>>Entry Name: **Platyphylline**

Synonym(s): 1,2-Dihydro-12-hydroxysenecionan-11,16-dione, 9Cl. Platifillin



CAS Registry Number: 480-78-4

Related CAS Registry Numbers(s): 1257-59-6

Molecular Formula: C₁₈H₂₇NO₅

Molecular Weight: 337.415

Accurate Mass: 337.188924

Percentage Composition: C 64.07%; H 8.07%; N 4.15%; O 23.71%

Biological Source: Alkaloid from *Senecio platyphyllus*, *Senecio adnatus*, *Senecio hygrophyllus* other *Senecio* spp. and *Adenostyles* spp. and *Petasites laevigatus* (Compositae)

Use/Importance: Shows atropine-like activity. Antispasmodic, mydriatic agent. Has been used in the USSR for treatment of gastrointestinal hypermotility and peptic ulceration. Used as tartrate

Physical Description: Needles (H₂O)

Melting Point: Mp 129° (124-125°)

Optical Rotation: [α]_D −56 (CHCl₃). [α]_D −59 (EtOH)

Solubility: Spar. sol. hot H₂O, petrol

Calculated Log P Data: Log P 0.45 (uncertain value) (calc)

Other Data: Rel. nontoxic; lacks hepatotoxicity of other pyrrolizidine alkaloids

Hazard & Toxicity: LD₅₀ (rat, ipr) 252 mg/kg

>>Derivative: Methiodide

Physical Description: Needles (EtOH)

Melting Point: Mp 216-217°

Optical Rotation: [α]_D −31.3

>>Derivative: N-Oxide

Synonym(s): Platyphylline N-oxide

Molecular Formula: C₁₈H₂₇NO₆

Molecular Weight: 353.414

Accurate Mass: 353.183839

Percentage Composition: C 61.17%; H 7.70%; N 3.96%; O 27.16%

Biological Source: Alkaloid from *Senecio* spp. The form in which Platyphylline is present in *Senecio hygrophyllus*, and propably in other spp. (Compositae)

Melting Point: Mp 180-181°

Optical Rotation: [α]_D −44.6 (CHCl₃). [α]_D −59 (H₂O)

>>Derivative: 1α-Hydroxy

Synonym(s): Hadiensine

Molecular Formula: C₁₈H₂₇NO₆

Molecular Weight: 353.414

Accurate Mass: 353.183839

Percentage Composition: C 61.17%; H 7.70%; N 3.96%; O 27.16%

Biological Source: Alkaloid from *Senecio hadiensis* (Compositae)

Physical Description: Gum; cryst. (MeOH/EtOH)(as perchlorate)

Melting Point: Mp 279-280° (perchlorate)

Optical Rotation: [α]_D −83 (c, 1.6 in MeOH)