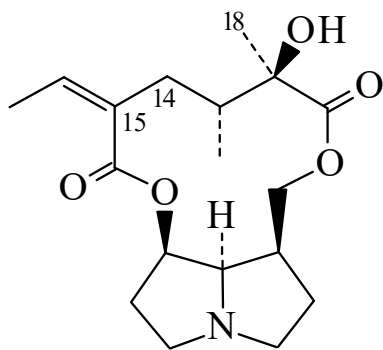




**>>Entry Name: Platyphylline**

**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:** C<sub>18</sub>H<sub>27</sub>NO<sub>5</sub>

**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 (H<sub>2</sub>O)

**Melting Point:** Mp 129° (124-125°)

**Optical Rotation:** [ $\alpha$ ]<sub>D</sub> -56 (CHCl<sub>3</sub>). [ $\alpha$ ]<sub>D</sub> -59 (EtOH)

**Solubility:** Spar. sol. hot H<sub>2</sub>O, petrol

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

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

**Hazard & Toxicity:** LD<sub>50</sub> (rat, ipr) 252 mg/kg

**>>Derivative:** Methiodide

**Physical Description:** Needles (EtOH)

**Melting Point:** Mp 216-217°

**Optical Rotation:** [ $\alpha$ ]<sub>D</sub> -31.3

**>>Derivative:** N-Oxide

**Synonym(s):** Platyphylline N-oxide

**Molecular Formula:** C<sub>18</sub>H<sub>27</sub>NO<sub>6</sub>

**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:** [ $\alpha$ ]<sub>D</sub> -44.6 (CHCl<sub>3</sub>). [ $\alpha$ ]<sub>D</sub> -59 (H<sub>2</sub>O)

**>>Derivative:** 1 $\alpha$ -Hydroxy

**Synonym(s):** Hadiensine

**Molecular Formula:** C<sub>18</sub>H<sub>27</sub>NO<sub>6</sub>

**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:** [ $\alpha$ ]<sub>D</sub> -83 (c, 1.6 in MeOH)