



CAS Registry Number: 163135-92-0

Molecular Formula: C₄₄H₇₁NO₁₅

Molecular Weight: 854.043

Accurate Mass: 853.482374

Percentage Composition: C 61.88%; H 8.38%; N 1.64%; O 28.10%

Biological Source: From roots of *Solanum anguivi* (Solanaceae)

Physical Description: Amorph.

Optical Rotation: [α]_D²² -83.2 (c, 0.87 in Py)

>> **Derivative:** 3-*O*-[α -L-Rhamnopyranosyl-[β -D-glucopyranosyl-(1 $\rightarrow$ 4)]- β -D-glucopyranoside]

Molecular Formula: C₄₅H₇₃NO₁₆

Molecular Weight: 884.069

Accurate Mass: 883.492939

Percentage Composition: C 61.14%; H 8.32%; N 1.58%; O 28.96%

Biological Source: Alkaloid from the bulbs of *Lilium brownii* var. *colchesteri* (Liliaceae)

Physical Description: Amorph. powder

Optical Rotation: [α]_D²⁸ -77.3 (c, 0.11 in MeOH)

>> **Derivative:** 3-*O*-[α -L-Rhamnopyranosyl-(1 $\rightarrow$ 2)-[α -L-rhamnopyranosyl-(1 $\rightarrow$ 4)]- β -D-glucopyranoside]

Synonym(s): Solamargine

CAS Registry Number: 20311-51-7

Molecular Formula: C₄₅H₇₃NO₁₅

Molecular Weight: 868.069

Accurate Mass: 867.498024

Percentage Composition: C 62.26%; H 8.48%; N 1.61%; O 27.65%

Biological Source: Alkaloid from *Solanum marginatum* and a very large number of *Solanum* spp. (Solanaceae)

Melting Point: Mp 301 dec.°

Optical Rotation: [α]_D -105 (MeOH)

>> **Derivative:** 3-*O*-[α -L-Rhamnopyranosyl-(1 $\rightarrow$ 3)-[α -L-rhamnopyranosyl-(1 $\rightarrow$ 4)]- β -D-glucopyranoside]

Synonym(s): Solanelagnine

CAS Registry Number: 181023-53-0

Molecular Formula: C₄₅H₇₃NO₁₅

Molecular Weight: 868.069

Accurate Mass: 867.498024

Percentage Composition: C 62.26%; H 8.48%; N 1.61%; O 27.65%

Biological Source: Alkaloid from *Solanum elaeagnifolium*

>> **Derivative:** 3-*O*-[α -L-Rhamnopyranosyl-(1 $\rightarrow$ 2)-[β -D-glucopyranosyl-(1 $\rightarrow$ 3)]- β -D-galactopyranoside]

Synonym(s): Solasonine. Solasodamine

CAS Registry Number: 19121-58-5

Molecular Formula: C₄₅H₇₃NO₁₆

Molecular Weight: 884.069

Accurate Mass: 883.492939

Percentage Composition: C 61.14%; H 8.32%; N 1.58%; O 28.96%

Biological Source: Alkaloid from *Solanum sodomium* and a very large number of *Solanum* spp. (Solanaceae)

Use/Importance: Molluscicidal agent

Melting Point: Mp 300-301°

Optical Rotation: [α]_D -74 (MeOH)

Solubility: BERDY SOL: Sol. MeOH; poorly sol. H₂O, hexane

Calculated Log P Data: Log P 0.12 (uncertain value) (calc)

UV: [neutral] $\lambda_{\max}$ (MeOH) (Berdy)

Hazard & Toxicity: BERDY HAZD : LD₅₀ (mus, ipr) 30 mg/kg