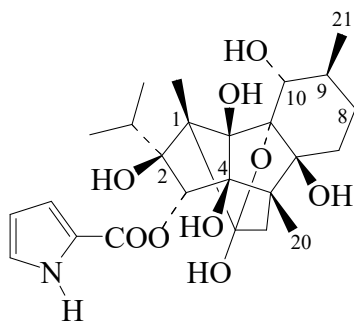




>>Entry Name: Ryanodine

Synonym(s): Ryanex. Ryanicide. Ryno-tox



CAS Registry Number: 15662-33-6

Related CAS Registry Numbers(s): 100427-92-7

Molecular Formula: C₂₅H₃₅NO₉

Molecular Weight: 493.553

Accurate Mass: 493.231184

Percentage Composition: C 60.84%; H 7.15%; N 2.84%; O 29.18%

Biological Source: Alkaloid from *Ryania speciosa* (Flacourtiaceae)

Use/Importance: Calcium transport blocker. Insecticide, now superseded

Physical Description: Tan solid

Melting Point: Mp 219-220°

Optical Rotation: $[\alpha]_D^{25} +26$ (c, 1.02 in MeOH)

Calculated Log P Data: Log P -1.22 (uncertain value) (calc)

Hazard & Toxicity: Human systemic effects by ingestion (gastrointestinal and CNS). Harmful in contact with skin. LD₅₀ (rat, orl) 750 mg/kg. LD₅₀ (rat, skn) 750 mg/kg

Sigma: R6017

>>Derivative: 8,9-Didehydro

Synonym(s): 8,9-Didehydoryanodine

CAS Registry Number: 99964-45-1

Molecular Formula: C₂₅H₃₃NO₉

Molecular Weight: 491.537

Accurate Mass: 491.215534

Percentage Composition: C 61.09%; H 6.77%; N 2.85%; O 29.29%

Biological Source: Constit. of *Ryania speciosa*

>>Derivative: 9,21-Didehydro

Synonym(s): Dehydroryanodine. 9,21-Didehydroryanodine

CAS Registry Number: 94513-55-0

Molecular Formula: C₂₅H₃₃NO₉

Molecular Weight: 491.537

Accurate Mass: 491.215534

Percentage Composition: C 61.09%; H 6.77%; N 2.85%; O 29.29%

Biological Source: Second most abundant ryanodine-type alkaloid from *Ryania speciosa* (Flacourtiaceae)

Melting Point: Mp 175-179°

Sigma: D7794

>>Derivative: 4-Deoxy, 20-hydroxy

Synonym(s): Spiganthine. 4-Deoxy-20-hydroxyryanodine

CAS Registry Number: 168034-68-2

Molecular Formula: C₂₅H₃₅NO₉

Molecular Weight: 493.553

Accurate Mass: 493.231184

Percentage Composition: C 60.84%; H 7.15%; N 2.84%; O 29.18%

Biological Source: Alkaloid from *Spigelia anthelmia*

Biological Use/Importance: Cardiotonic agent

Physical Description: Cryst. (CHCl₃/Me₂CO)

Melting Point: Mp 158°

Optical Rotation: $[\alpha]$