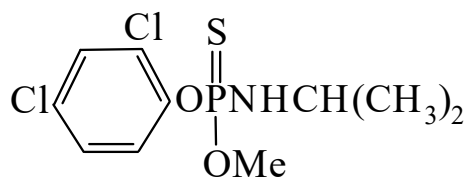




>>Entry Name: Zytron

Synonym(s): *O*-(2,4-Dichlorophenyl) *O*-methyl (1-methylethyl)phosphoramidothioate, 9Cl. *O*-(2,4-Dichlorophenyl) *O*-methyl isopropylphosphoramidothioate. DMPA, WSSA



CAS Registry Number: 299-85-4

Molecular Formula: C₁₀H₁₄Cl₂NO₂PS

Molecular Weight: 314.171

Accurate Mass: 312.98599

Percentage Composition: C 38.23%; H 4.49%; Cl 22.57%; N 4.46%; O 10.19%; P 9.86%; S 10.21%

Hazard & Toxicity: LD₅₀ (rat, orl) 270 mg/kg; LD₅₀ (rbt, skn) 1680 mg/kg

>>Variant: (+)-form

CAS Registry Number: 21248-23-7

Molecular Formula: C₁₀H₁₄Cl₂NO₂PS

Molecular Weight: 314.171

Accurate Mass: 312.98599

Percentage Composition: C 38.23%; H 4.49%; Cl 22.57%; N 4.46%; O 10.19%; P 9.86%; S 10.21%

Use/Importance: Less-active form

Physical Description: Oil

Optical Rotation: [α]_D +28.2 (c, 0.32 in C₆H₆)

>>Variant: (–)-form

CAS Registry Number: 21248-24-8

Molecular Formula: C₁₀H₁₄Cl₂NO₂PS

Molecular Weight: 314.171

Accurate Mass: 312.98599

Percentage Composition: C 38.23%; H 4.49%; Cl 22.57%; N 4.46%; O 10.19%; P 9.86%; S 10.21%

Use/Importance: More active form

Physical Description: Oil

Optical Rotation: [α]_D –27.9 (c, 0.4 in C₆H₆)

>>Variant: (±)-form

CAS Registry Number: 25137-74-0

Molecular Formula: C₁₀H₁₄Cl₂NO₂PS

Molecular Weight: 314.171

Accurate Mass: 312.98599

Percentage Composition: C 38.23%; H 4.49%; Cl 22.57%; N 4.46%; O 10.19%; P 9.86%; S 10.21%

Use/Importance: Herbicide, no longer in widespread use

Physical Description: Solid

Melting Point: Mp 49-51°

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