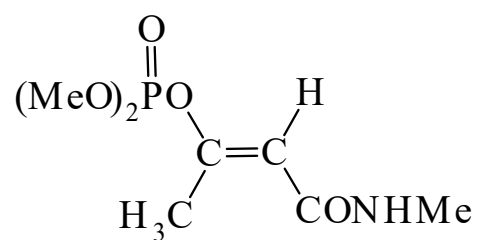




>>Entry Name: Monocrotophos, BSI, ISO, JMAF

ENTRY UNDER REVIEW

Synonym(s): Dimethyl 1-methyl-3-(methylamino)-3-oxo-1-propenyl phosphate, 9CI. Dimethyl phosphate, ester with 3-hydroxy-*N*-methylcrotonamide, 8CI. Dimethyl 1-methyl-2-methylcarbamoylvinyl phosphate. Nuvacron. Azodrin. Alphate. Parryfos. Cerophos. Apadrin. Croton 36. (*E*)-form



CAS Registry Number: 2157-98-4

Molecular Formula: C₇H₁₄NO₅P

Molecular Weight: 223.165

Accurate Mass: 223.060961

Percentage Composition: C 37.67%; H 6.32%; N 6.28%; O 35.85%; P 13.88%

Use/Importance: Metab. of bidrin

>>Variant: (*E*)-form

CAS Registry Number: 6923-22-4

Molecular Formula: C₇H₁₄NO₅P

Molecular Weight: 223.165

Accurate Mass: 223.060961

Percentage Composition: C 37.67%; H 6.32%; N 6.28%; O 35.85%; P 13.88%

Use/Importance: Agricultural insecticide with both systemic and contact action. Cholinesterase inhibitor

Biological Use/Importance: Cholinesterase inhibitor

Physical Description: Cryst.

Melting Point: Mp 54-55°

Solubility: Sol. H₂O, Me₂CO; insol. hexane

Hazard & Toxicity: LD₅₀ (rat, orl) 8 mg/kg. LD₅₀ (rat, skn) 112 mg/kg. LC₅₀ (rat, ihl) 63 mg m⁻³ (4 h exposure). Human neurotoxic effects. ACGIH TLV 0.25 mg m⁻³ (sk)

>>Variant: (*Z*)-form

CAS Registry Number: 919-44-8

Molecular Formula: C₇H₁₄NO₅P

Molecular Weight: 223.165

Accurate Mass: 223.060961

Percentage Composition: C 37.67%; H 6.32%; N 6.28%; O 35.85%; P 13.88%

Physical Description: No phys. props. reported

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