



>>Entry Name: Aldoxycarb

Synonym(s): 2-Methyl-2-(methylthio)propanal *O*-[(methylamino)carbonyl]oxime, 9Cl. 2-Methyl-2-(methylthio)propionaldehyde *O*-methylcarbamoyloxime. Aldicarb, ANSI, BSI, ISO, Temik

CAS Registry Number: 116-06-3

Related CAS Registry Numbers(s): 61602-66-2

MeSC(CH3)2CH=NOOCNMe

Molecular Formula: C₇H₁₄N₂O₂S

Molecular Weight: 190.266

Accurate Mass: 190.077598

Percentage Composition: C 44.19%; H 7.42%; N 14.72%; O 16.82%; S 16.85%

Use/Importance: Soil applied insecticide, acaricide and nematocide

Physical Description: Cryst.

Melting Point: Mp 98-100°

Solubility: Spar. sol. H₂O

Hazard & Toxicity: LD₅₀ (rat, orl) 0.81-0.93 mg/kg

>>Derivative: S-Oxide

CAS Registry Number: 1646-87-3

Molecular Formula: C₇H₁₄N₂O₃S

Molecular Weight: 206.265

Accurate Mass: 206.072513

Percentage Composition: C 40.76%; H 6.84%; N 13.58%; O 23.27%; S 15.55%

Use/Importance: Soil metabolite of aldoxycarb. Cholinesterase inhibitor

Physical Description: Cryst. (C₆H₆/EtOAc)

Melting Point: Mp 108-110°

>>Derivative: S,S-Dioxide

Synonym(s): Aldoxycarb sulfone, BSI. Standak. Aldicarb sulfone

CAS Registry Number: 1646-88-4

Molecular Formula: C₇H₁₄N₂O₄S

Molecular Weight: 222.265

Accurate Mass: 222.067428

Percentage Composition: C 37.83%; H 6.35%; N 12.60%; O 28.79%; S 14.43%

Source/Synthesis: Chemical or metab. oxidn. prod. of Aldicarb

Use/Importance: Soil-applied systemic insecticide and nematocide. Powerful cholinesterase inhibitor

Physical Description: Cryst.

Melting Point: Mp 140-142°

Solubility: Spar. sol. H₂O

Hazard & Toxicity: LD₅₀ (rat, orl) 26.8 mg/kg. LD₅₀ (rat, skn) 1000 mg/kg

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