

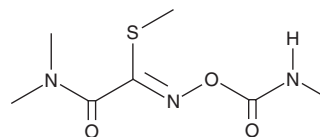
PRODUCT INFORMATION



Oxamyl

Item No. 25609

CAS Registry No.: 23135-22-0
Formal Name: 2-(dimethylamino)-N-[[[(methylamino)carbonyl]oxy]-2-oxo-ethanimidothioic acid, methyl ester
Synonym: NSC 379588
MF: C₇H₁₃N₃O₃S
FW: 219.3
Purity: ≥98%
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Oxamyl is supplied as a solid. A stock solution may be made by dissolving the oxamyl in the solvent of choice, which should be purged with an inert gas. Oxamyl is slightly soluble in chloroform and methanol.

Description

Oxamyl is a carbamate pesticide and an inhibitor of acetylcholinesterase (AChE; IC₅₀ = 1.67 μM for *C. gigas* enzyme).¹ It is nematocidal, decreasing the number of *P. penetrans* and *M. hapla* per gram of alfalfa (*M. sativa*) root when applied to seeds at a concentration of 50 mg/ml.² Oxamyl (50 and 100 μg/ml) is also toxic to citrus nematode (*T. semipenetrans*) larvae.³ *In vivo*, oxamyl (2.1 and 3.5 mg/kg) inhibits plasma and brain AChE, as well as liver glucose-6-phosphatase and succinic acid dehydrogenase, and reduces body weight gain in rats.⁴ Formulations containing oxamyl have been used to control nematode infestation of field crops.

References

1. Anguiano, G.A., Amador, A., Moreno-Legorreta, M., *et al.* Effects of exposure to oxamyl, carbofuran, dichlorvos, and lindane on acetylcholinesterase activity in the gills of the Pacific oyster *Crassostrea gigas*. *Environ. Toxicol.* **25**(4), 327-332 (2010).
2. Townshend, J.L. and Chiba, M. Control of *Pratylenchus penetrans* and *Meloidogyne hapla* and yield response of alfalfa due to oxamyl seed treatments. *J. Nematol.* **19**(4), 454-458 (1987).
3. Baines, R.C. and Small, R.H. Effects of oxamyl on the citrus nematode, *Tylenchulus semipenetrans*, and on infection of sweet orange. *J. Nematol.* **8**(2), 122-130 (1976).
4. Fayez, V. and Kilgore, W.W. Acute toxic effects of oxamyl in the rat. *Fundam. Appl. Toxicol.* **18**(1), 155-159 (1992).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM