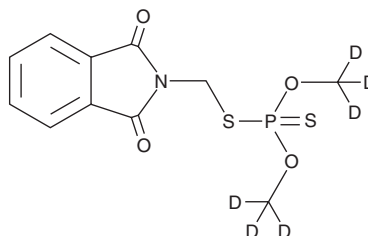


PRODUCT INFORMATION



Phosmet-d₆ Item No. 39569

CAS Registry No.: 2083623-41-8
Formal Name: S-((1,3-dioxoisindolin-2-yl)methyl) O,O-bis(methyl-d₃) phosphorodithioate
Synonym: Phthalophos-d₆
MF: C₁₁H₆D₆NO₄PS₂
FW: 323.4
Chemical Purity: ≥98% (Phosmet)
Deuterium Incorporation: ≥99% deuterated forms (d₁-d₆); ≤1% d₀
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

Phosmet-d₆ is intended for use as an internal standard for the quantification of phosmet (Item No. 25812) by GC- or LC-MS. The accuracy of the sample weight in this vial is between 5% over and 2% under the amount shown on the vial. If better precision is required, the deuterated standard should be quantitated against a more precisely weighed unlabeled standard by constructing a standard curve of peak intensity ratios (deuterated versus unlabeled).

Phosmet-d₆ is supplied as a solid. A stock solution may be made by dissolving the phosmet-d₆ in the solvent of choice, which should be purged with an inert gas. Phosmet-d₆ is slightly soluble in chloroform and methanol.

Description

Phosmet is an organophosphate insecticide and acaricide.¹⁻³ It reduces apple damage by a large variety of insects, including apple maggots, codling moths, and obliquebanded leafrollers, when used as either a border or cover spray at a concentration of 1.9 kg AI/hectare.² Phosmet is effective in controlling *S. scabiei* in pigs when applied as a 20% pour-on solution.³ It is toxic to rats via oral administration (LC₅₀ = 230 mg/kg).⁴ Formulations containing phosmet have been used in the control of insects and mites in agriculture.

References

1. Abdollahi, M. and Karami-Mohajeri, S. A comprehensive review on experimental and clinical findings in intermediate syndrome caused by organophosphate poisoning. *Toxicol. Appl. Pharmacol.* **258(3)**, 309-314 (2012).
2. Trimble, R.M. and Vickers, P.M. Evaluation of border sprays for managing the codling moth (Tortricidae: Lepidoptera) and the apple maggot (Tephritidae: Diptera) in Ontario apple orchards. *J. Econ. Entomol.* **93(3)**, 777-787 (2000).
3. Hewett, G.R. Phosmet for the systemic control of pig mange in growing pigs. *Vet. Parasitol.* **18(3)**, 265-268 (1985).
4. Authority, E.F.S. Conclusion on the peer review of the pesticide risk assessment of the active substance phosmet. *EFSA J.* **9(5)**, 2162 (2011).

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.

WARRANTY AND LIMITATION OF REMEDY

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