

PRODUCT INFORMATION

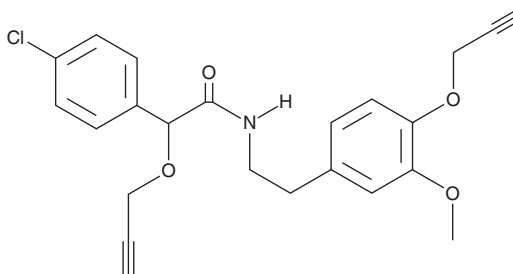


Mandipropamid

Item No. 40129

CAS Registry No.: 374726-62-2
Formal Name: 4-chloro-N-[2-[3-methoxy-4-(2-propyn-1-yloxy)phenyl]ethyl]-α-(2-propyn-1-yloxy)-benzeneacetamide

MF: C₂₃H₂₂ClNO₄
FW: 411.9
Purity: ≥95%
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

Mandipropamid is supplied as a solid. A stock solution may be made by dissolving the mandipropamid in the solvent of choice, which should be purged with an inert gas. Mandipropamid is soluble in the organic solvent acetonitrile.

Description

Mandipropamid is a carboxylic acid amide fungicide.^{1,2} It inhibits cellulose synthesis and germ tube elongation in *P. infestans* when used at a concentration of 68 nM.¹ Mandipropamid reduces mycelial growth of *Phytophthora* and *P. litchi* (EC₅₀s = 0.008-0.03 mg/L).² It is toxic to zebrafish embryos, larvae, and adults (LC₅₀s = 19.91, 4.53, and 4.85 mg/L, respectively). Mandipropamid has been used as a chemical inducer of proximity to study protein translocation *in vitro* and *in vivo*.³ Formulations containing mandipropamid have been used as fungicides in agriculture.

References

1. Blum, M., Boehler, M., Randall, E., *et al.* Mandipropamid targets the cellulose synthase-like PiCesA3 to inhibit cell wall biosynthesis in the oomycete plant pathogen, *Phytophthora infestans*. *Mol. Plant Pathol.* **11**(2), 227-243 (2010).
2. Zhang, J., Wu, Q., Zhong, Y., *et al.* Enantioselective bioactivity, toxicity, and degradation in vegetables and soil of chiral fungicide mandipropamid. *J. Agric. Food Chem.* **69**(45), 13416-13424 (2021).
3. Ziegler, M.J., Yserentant, K., Dunsing, V., *et al.* Mandipropamid as a chemical inducer of proximity for *in vivo* applications. *Nat. Chem. Biol.* **18**(1), 64-69 (2022).

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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