

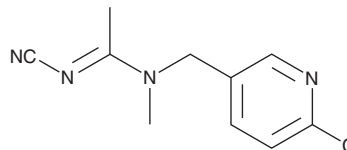
PRODUCT INFORMATION



Acetamiprid

Item No. 24129

CAS Registry No.: 135410-20-7
Formal Name: (1E)-N-[(6-chloro-3-pyridinyl)methyl]-N'-cyano-N-methyl-ethanimidamide
MF: $C_{10}H_{11}ClN_4$
FW: 222.7
Purity: $\geq 98\%$
Supplied as: A solid
Storage: -20°C
Stability: ≥ 2 years



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

Laboratory Procedures

Acetamiprid is supplied as a solid. A stock solution may be made by dissolving the acetamiprid in the solvent of choice. Acetamiprid is soluble in organic solvents such as methanol and DMSO, which should be purged with an inert gas.

Description

Acetamiprid is a neonicotinoid insecticide that acts as an agonist of insect nicotinic acetylcholine receptors (nAChRs). It activates nAChRs containing *N. lugens* $\alpha 1$ and rat $\beta 2$ subunits with an EC_{50} value of $67\text{ }\mu\text{M}$ in *X. laevis* oocytes.¹ Acetamiprid administered to pregnant mice at a dose of 1 mg/kg leads to sexual and aggressive behaviors in adult male offspring while doses of 1 and 10 mg/kg decrease anxiety-like behavior of adult male offspring in the light-dark transition test.² Formulations containing acetamiprid have been used to control sucking insects on crops and pets.

References

1. Liu, Z., Williamson, M.S., Lansdell, S.J., *et al.* A nicotinic acetylcholine receptor mutation (Y151S) causes reduced agonist potency to a range of neonicotinoid insecticides. *J. Neurochem.* **99**(4), 1273-1281 (2006).
2. Sano, K., Isobe, T., Yang, J., *et al.* *In utero* and lactational exposure to acetamiprid induces abnormalities in socio-sexual and anxiety-related behaviors of male mice. *Front. Neurosci.* **10**:228 (2016).

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

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 05/09/2018

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