PRODUCT INFORMATION



Thiacloprid

Item No. 25824

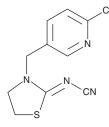
CAS Registry No.: 111988-49-9

[N(Z)]-N-[3-[(6-chloro-3-pyridinyl)methyl]-Formal Name:

2-thiazolidinylidene]-cyanamide

Synonym: **BAY YRC 2894** C₁₀H₉CIN₄S MF:

252.7 FW: **Purity:** ≥98% Supplied as: A solid Storage: -20°C Stability: ≥4 vears



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

Laboratory Procedures

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

Description

Thiacloprid is a neonicotinoid insecticide.¹ It is an antagonist of nicotinic acetylcholine receptors (nAChRs; IC₅₀ = 2.7 nM for the D. melanogaster enzyme). Thiacloprid is lethal to D. melanogaster $(LD_{50} = 0.03 \text{ mg/kg})$. It eliminates aphids on apple tree leaves in field studies when applied at a concentration of 0.0072% AI/L.² Thiacloprid is toxic to mice (LD₅₀ = 28 mg/kg).¹

References

- 1. Tomizawa, M., Lee, D.L., and Casida, J.E. Neonicotinoid insecticides: Molecular features conferring selectivity for insect versus mammalian nicotinic receptors. J. Agric. Food Chem. 48(12), 6016-6024 (2000).
- 2. Elbert, A., Erdelen, C., Kuhnhold, J., et al. Thiacloprid, a novel neonicotinoid insecticide for foliar application. Proc. Brighton Crop. Prot. Conf. - Pests and Diseases 1, 21-26 (2000).

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

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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