

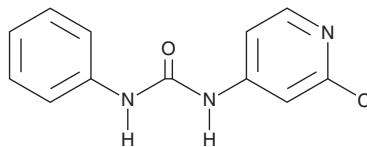
PRODUCT INFORMATION



Forchlorfenuron

Item No. 32948

CAS Registry No.: 68157-60-8
Formal Name: N-(2-chloro-4-pyridinyl)-N'-phenyl-urea
Synonyms: CPPU, KT 30, N-Phenyl-N'-(2-chloro-4-pyridyl)urea
MF: C₁₂H₁₀ClN₃O
FW: 247.7
Purity: ≥98%
UV/Vis.: λ_{max}: 263 nm
Supplied as: A crystalline 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

Forchlorfenuron is supplied as a crystalline solid. A stock solution may be made by dissolving the forchlorfenuron in the solvent of choice, which should be purged with an inert gas. Forchlorfenuron is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of forchlorfenuron in DMSO and DMF is approximately 30 mg/ml. Forchlorfenuron is slightly soluble in ethanol.

Forchlorfenuron is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, forchlorfenuron should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Forchlorfenuron has a solubility of approximately 0.25 mg/ml in a 1:3 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Forchlorfenuron is a plant growth regulator.^{1,2} It stimulates fruit growth, as well as increases fruit size and ripening rate, in kiwifruit (*A. chinensis*) when applied topically at a concentration of 40 mg/L.¹ Forchlorfenuron accelerates fruit growth and increases rind thickness in watermelons (*C. lanatus*).² Formulations containing forchlorfenuron have been used as plant growth regulators and herbicides in agriculture.

References

1. Iwahori, S., Tominaga, S., and Yamasaki, T. Stimulation of fruit growth of kiwifruit, *Actinidia chinensis* Planch., by N-(2-chloro-4-pyridyl)-N'-phenylurea, a diphenylurea-derivative cytokinin. *Sci. Hort.* **35(1-2)**, 109-115 (1988).
2. Kano, Y. Effects of CPPU treatment on fruit and rind development of watermelons (*Citrullus lanatus* Matsum. et Nakai). *J. Hort. Sci. Biotechnol.* **75(6)**, 651-654 (2000).

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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