

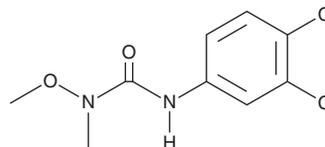
PRODUCT INFORMATION



Linuron

Item No. 36205

CAS Registry No.: 330-55-2
Formal Name: N'-(3,4-dichlorophenyl)-N-methoxy-N-methyl-urea
MF: C₉H₁₀Cl₂N₂O₂
FW: 249.1
Purity: ≥95%
UV/Vis.: λ_{max}: 249 nm
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

Linuron is supplied as a solid. A stock solution may be made by dissolving the linuron in the solvent of choice, which should be purged with an inert gas. Linuron is soluble in the organic solvent DMSO at a concentration of approximately 1 mg/ml. Linuron is also slightly soluble in ethanol and dimethyl formamide.

Description

Linuron is a phenylurea herbicide.¹ It inhibits the androgenic effect of dihydrotestosterone in MDA-kb2 breast cancer cells (IC₂₀ = 1.74 μM in a reporter assay). Linuron (100 mg/kg) inhibits testosterone-induced growth of the seminal vesicles, ventral prostate, and levator ani and bulbocavernosus muscles in castrated rats.² Post-emergent application of linuron to carrots controls the growth of the weeds redroot pigweed and lambsquarters.³ Formulations containing linuron have been used as herbicides in agriculture.

References

1. Orton, F., Rosivatz, E., Scholze, M., *et al.* Widely used pesticides with previously unknown endocrine activity revealed as *in vitro* antiandrogens. *Environ. Health Perspect.* **119(6)**, 794-800 (2011).
2. Lambright, C., Ostby, J., Bobseine, K., *et al.* Cellular and molecular mechanisms of action of linuron: An antiandrogenic herbicide that produces reproductive malformations in male rats. *Toxicol. Sci.* **56(2)**, 389-399 (2000).
3. Bellinder, R.R., Kirkwyland, J.J., and Wallace, R.W. Carrot (*Daucus carota*) and weed response to linuron and metribuzin applied at different crop stages. *Weed Technol.* **11(2)**, 235-240 (1997).

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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