

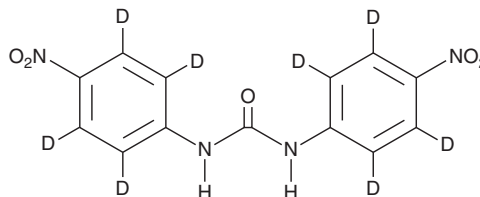
PRODUCT INFORMATION



4,4'-Dinitrocarbanilide-d₈

Item No. 45610

CAS Registry No.: 1156508-87-0
Formal Name: N,N'-bis(4-nitrophenyl-2,3,5,6-d₄)-urea
Synonym: DNC-d₈
MF: C₁₃H₂D₈N₄O₅
FW: 310.3
Chemical Purity: ≥98% (4-,4'-dinitrocarbanilide)
Deuterium Incorporation: ≥99% deuterated forms (d₁-d₈); ≤1% d₀
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

4,4'-Dinitrocarbanilide-d₈ is intended for use as an internal standard for the quantification of 4-,4'-dinitrocarbanilide by GC- or LC-MC. The accuracy of the sample weight in this vial is between 5% over and 2% under the amount shown on the vial. If better precision is required, the deuterated standard should be quantitated against a more precisely weighed unlabeled standard by constructing a standard curve of peak intensity ratios (deuterated versus unlabeled).

4,4'-Dinitrocarbanilide-d₈ is supplied as a solid. A stock solution may be made by dissolving the 4,4'-dinitrocarbanilide-d₈ in the solvent of choice, which should be purged with an inert gas. 4,4'-Dinitrocarbanilide-d₈ is soluble in methanol.

Description

4,4'-Dinitrocarbanilide is a component of the coccidiostat nicarbazin (Item No. 35110).^{1,2} It has been found in the serum and muscle of chickens and the yolks of eggs laid by hens administered nicarbazin.^{1,3} 4,4'-Dinitrocarbanilide decreases the hatchability of eggs in chickens, ducks, and geese.^{2,3} Formulations containing 4,4'-dinitrocarbanilide have been used in the prevention of coccidiosis in chickens.

References

- Ott, W.H., Kuna, S., Porter, C.C., *et al.* Biological studies on nicarbazin, a new anticoccidial agent. *Poult. Sci.* **35(6)**, 1355-1367 (1956).
- Primus, T.M., Kohler, D.J., Goodall, M.A., *et al.* Determination of 4,4'-dinitrocarbanilide (DNC), the active component of the antifertility agent nicarbazin, in chicken, duck, and goose plasma. *J. Agric. Food Chem.* **49(8)**, 3589-3593 (2001).
- Polin, D., Gilfillan, J.L., Ott, W.H., *et al.* 4,4'-Dinitrocarbanilide in egg yolks from hens fed nicarbazin. *Poultry Sci.* **35(6)**, 1367-1371 (1956).

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

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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