

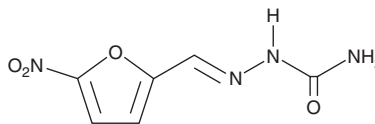
PRODUCT INFORMATION



Nitrofurazone

Item No. 21656

CAS Registry No.: 59-87-0
Formal Name: 2-[(5-nitro-2-furanyl)methylene]-hydrazinecarboxamide
Synonyms: Furacilin, Nitrofural, NSC 1602, NSC 2100, NSC 44009
MF: C₆H₆N₄O₄
FW: 198.1
Purity: ≥98%
UV/Vis.: λ_{max}: 264, 367 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.

Description

Nitrofurazone is a nitrofurazone antibiotic that is active against a variety of Gram-negative and Gram-positive bacteria including laboratory strains of *S. aureus*, *E. faecalis*, and *E. coli* (MICs = 8 µg/ml for all) as well as clinical isolates of several urinary tract pathogens including *Enterococcus*, coagulase-negative staphylococci, *Klebsiella*, and *P. mirabilis* (MICs = 2-64 µg/ml).^{1,2} Nitrofurazone induces mutagenicity in mammalian and bacterial cell-based assays and carcinogenesis, reproductive effects, and toxicity in rats and mice (LD₅₀s = 590 and 640 mg/kg, respectively).³ Formulations containing nitrofurazone have been used in the topical treatment and prevention of bacterial infections in humans and animals as well as oral treatment of trypanosomiasis.

References

1. Johnson, J.R., Berggren, T., and Conway, A.J. Activity of a nitrofurazone matrix urinary catheter against catheter-associated uropathogens. *Antimicrob. Agents Chemother.* **37**(9), 2033-2036 (1993).
2. Guay, D.R. An update on the role of nitrofurans in the management of urinary tract infections. *Drugs* **61**(3), 353-364 (2001).
3. Kari, F. Toxicology and carcinogenesis studies of nitrofurazone (CAS No. 59-87-0) in F344/N rats and B6C3F1 mice (feed studies). *National Toxicology Program* **337**, 1-183 (1988).

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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