

Nitrofurantoin

NSC 44150 **ALTERNATE NAME:**

NSC 2107

1-[[(5-nitro-2-furanyl)methylene]amino]-2,4-imidazolidinedione

CATALOG #: B2698-1G B2698-5G

STRUCTURE:

MOLECULAR FORMULA: C 8 H 6 N 4 O 5

MOLECULAR WEIGHT: 238.16

CAS NUMBER: 67-20-9

APPEARANCE: Light orange to Yellow to Green powder

PURITY: ≥98%

~15 mg/ml Ethanol SOLUBILITY:

~25 mg/ml DMSO

DESCRIPTION: Nitrofurantoin is a nitrofuran antibiotic used to treat uncomplicated urinary tract infections. Nitrofurantoin

is converted by bacterial nitroreductases to electrophilic intermediates which inhibit the citric acid cycle as well as synthesis of DNA, RNA, and protein. This drug is more resistant to the development of bacterial resistance because it acts on many targets at once. It prevents kidney and bladder infection in rats following bladder inoculation with clinical isolates of P. mirabilis. Nitrofurantoin also prevents alkalization of urine as well as calculi and abscess formation in a rat model of P. vulgaris urinary tract

infection.

STORAGE TEMPERATURE: -20°C. Protect from light

HANDLING: Do not take internally. Wear gloves and mask when handling the product! Avoid contact by all modes of

exposure.

RELATED PRODUCTS:

Nitrofurantoin (AHD) ELISA Kit (E4275) Furazolidone ÈLISA Kit (K4231)

DISCLAIMER: FOR RESEARCH USE ONLY! Not to be used on humans.