

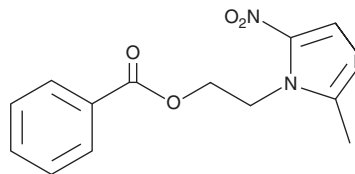
PRODUCT INFORMATION



Metronidazole Benzoate

Item No. 33316

CAS Registry No.: 13182-89-3
Formal Name: 2-methyl-5-nitro-1H-imidazole-1-ethanol 1-benzoate
Synonym: Benzoylmetronidazole
MF: C₁₃H₁₃N₃O₄
FW: 275.3
Purity: ≥98%
UV/Vis.: λ_{max}: 229, 309 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

Metronidazole benzoate is supplied as a crystalline solid. A stock solution may be made by dissolving the metronidazole benzoate in the solvent of choice, which should be purged with an inert gas. Metronidazole benzoate is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of metronidazole benzoate in these solvents is approximately 1 mg/ml in ethanol and 30 mg/ml in DMSO and DMF.

Metronidazole benzoate is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, metronidazole benzoate should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Metronidazole benzoate has a solubility of approximately 0.14 mg/ml in a 1:6 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Metronidazole benzoate is an antibiotic and antiprotozoal agent and ester form of metronidazole (Item No. 9002409).¹ It is active against *P. asaccharolyticus*, *C. perfringens*, *C. septicum*, *B. fragilis*, and *B. thetaiotaomicron* (MICs = 3.6, 7.3, 1.8, 7.3, and 7.3 μM, respectively). Metronidazole reduces parasitemia in rats when cultured with *T. congolense* or *T. b. gambiense* prior to infection.²

References

1. Bowden, K. and Izadi, J. Prodrugs - Part 2. Acylbenzoate esters of metronidazole. *Eur. J. Med. Chem.* **32(12)**, 995-1000 (1998).
2. Ogunbanwo, J.A., Agbonlahor, D.E., Adamu, A., et al. Effects of anti-protozoal drugs and histopathological studies on trypanosome species. *FEMS Immunol. Med. Microbiol.* **30(1)**, 73-83 (2001).

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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