# Diloxanide furoate

**Cat. No.:** HY-B1147

**CAS No.:** 3736-81-0

**Molecular Formula:** $C_{14}H_{11}Cl_2NO_4$

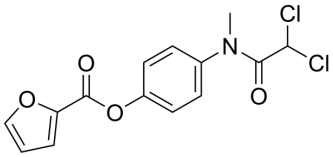
**Molecular Weight:** 328.15

**Target:** Parasite

**Pathway:** Anti-infection

**Storage:**

| | | |
|---|---|---|
| Powder | -20°C | 3 years |
| | 4°C | 2 years |
| In solvent | -80°C | 6 months |
| | -20°C | 1 month |



## SOLVENT & SOLUBILITY

**In Vitro**

DMSO : ≥ 50 mg/mL (152.37 mM)

Ethanol : 20 mg/mL (60.95 mM; Need ultrasonic)

* "≥" means soluble, but saturation unknown.

**Preparing Stock Solutions**

| Concentration \ Solvent \ Mass | 1 mg | 5 mg | 10 mg |
|---|---|---|---|
| 1 mM | 3.0474 mL | 15.2369 mL | 30.4739 mL |
| 5 mM | 0.6095 mL | 3.0474 mL | 6.0948 mL |
| 10 mM | 0.3047 mL | 1.5237 mL | 3.0474 mL |

Please refer to the solubility information to select the appropriate solvent.

**In Vivo**

1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
   Solubility: ≥ 2.5 mg/mL (7.62 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.5 mg/mL (7.62 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (7.62 mM); Clear solution

## BIOLOGICAL ACTIVITY

**Description**

Diloxanide furoate is the proagent of Diloxanide. Diloxanide furoate is a potent and orally active anti-protozoal agent and can be used for the research of amebiasis, mild intestinal amebiasis or asymptomatic cyst carriers[1].

**$IC_{50}$ & Target**

Amebae

| | |
|---|---|
| **In Vitro** | Diloxanide furoate (1.95-2.5 μg/ml) has potent activity against different strains of E. histolytica, it is against BYso (grown with bacteria), SFL3 (grown with Chrithidia sp.), and SFL3 (grown axenically) with MIC values of 2.5 μg/ml, 2.5 μg/ml and 1.95 μg/ml, respectively[2].<br>MCE has not independently confirmed the accuracy of these methods. They are for reference only. |
| **In Vivo** | Diloxanide furoate (oral administraion; 75-200 mg/kg; 3 days; once daily) is effective at different dose of dayin weanling rats. At 200 mg/kg, 100% of the treated rats are cured and no amoebic lesions are observed in the caecum. Besides, 85%,77%, and 44.4% of the treated rats are cured at the dose 150 mg/kg, 100 mg/kg, and 75 mg/kg, respectively. The $ED_{50}$ value is 77.9 mg/kg for this agent in rats[2].<br>MCE has not independently confirmed the accuracy of these methods. They are for reference only. |

| | |
|---|---|
| Animal Model: | Weanling Wistar rats[2] |
| Dosage: | 200 mg/kg; 150 mg/kg; 100 mg/kg; 75 mg/kg |
| Administration: | Oral administraion; 75-200 mg/kg; 3 days; once daily |
| Result: | Was against intestinal (caecal) amoebiasis in rats. |

## REFERENCES


[1]. VA CLASSIFICATION. Diloxanide (Systemic)

[2]. D K Chatterjee, et al. Antiamoebic activity of chonemorphine, a steroidal alkaloid, in experimental models. Parasitol Res. 1987;74(1):30-3.





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