Product Data Sheet

N-Butylthiophosphoric triamide

Cat. No.: HY-107199 CAS No.: 94317-64-3 Molecular Formula: $C_4H_{14}N_3PS$ Molecular Weight: 167.21 Target: Bacterial Pathway: Anti-infection

Storage: 4°C, protect from light

* In solvent: -80°C, 6 months; -20°C, 1 month (protect from light)

SOLVENT & SOLUBILITY

In Vitro

DMSO: 100 mg/mL (598.05 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	5.9805 mL	29.9025 mL	59.8050 mL
	5 mM	1.1961 mL	5.9805 mL	11.9610 mL
	10 mM	0.5981 mL	2.9903 mL	5.9805 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 (14.95 mM); Clear solution
- 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (14.95 mM); Clear solution
- 3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (14.95 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

N-Butylthiophosphoric triamide (NBPT) is a potent urease inhibitor. Butylthiophosphoric triamide inhibits nitrification and reduces the conversion of urea to NH3 gas^[1].

REFERENCES

[1]. Cantarella H, et al. Agronomic efficiency of NBPT as a urease inhibitor: A review. J Adv Res. 2018 May 24;13:19-27.

 $\label{lem:caution:Product} \textbf{Caution: Product has not been fully validated for medical applications. For research use only.}$

Tel: 609-228-6898 Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA

Page 2 of 2 www.MedChemExpress.com