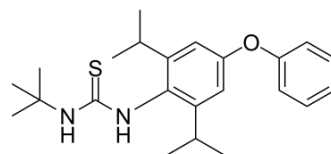


Diafenthiuron

Cat. No.:	HY-136394		
CAS No.:	80060-09-9		
Molecular Formula:	C ₂₃ H ₃₂ N ₂ OS		
Molecular Weight:	384.58		
Target:	Others		
Pathway:	Others		
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 : 100 mg/mL (260.02 mM; Need ultrasonic)
 H₂O : < 0.1 mg/mL (insoluble)

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	2.6002 mL	13.0012 mL	26.0024 mL
	5 mM	0.5200 mL	2.6002 mL	5.2005 mL
	10 mM	0.2600 mL	1.3001 mL	2.6002 mL

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

In Vivo

- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
 Solubility: 2.5 mg/mL (6.50 mM); Suspended solution; Need ultrasonic
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
 Solubility: 2.5 mg/mL (6.50 mM); Suspended solution; Need ultrasonic
- Add each solvent one by one: 10% DMSO >> 90% corn oil
 Solubility: ≥ 2.5 mg/mL (6.50 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Diafenthiuron is a thiourea compound commonly used pesticide. Diafenthiuron inhibits mitochondrial functioning in insect pests^[1].

REFERENCES

[1]. Muhammad Riaz-Ul-Haq, et al. Effect of Diafenthiuron exposure under short and long term experimental conditions on hematology, serum biochemical profile and elemental composition of a non-target organism, *Labeo rohita*. *Environ Toxicol Pharmacol*. 2018 Sep;62:40-45.

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