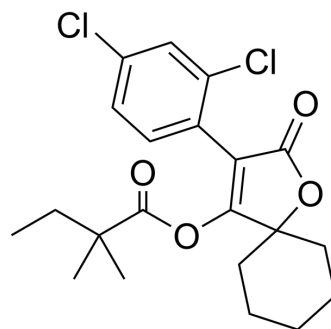


Spirodiclofen

Cat. No.:	HY-B0826		
CAS No.:	148477-71-8		
Molecular Formula:	C ₂₁ H ₂₄ Cl ₂ O ₄		
Molecular Weight:	411.32		
Target:	Parasite		
Pathway:	Anti-infection		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	2 years
		-20°C	1 year



SOLVENT & SOLUBILITY

In Vitro

DMSO : 120 mg/mL (291.74 mM; Need ultrasonic)
 Ethanol : 120 mg/mL (291.74 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	2.4312 mL	12.1560 mL	24.3120 mL
	5 mM	0.4862 mL	2.4312 mL	4.8624 mL
	10 mM	0.2431 mL	1.2156 mL	2.4312 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: ≥ 3 mg/mL (7.29 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
Solubility: 3 mg/mL (7.29 mM); Suspended solution; Need ultrasonic
- Add each solvent one by one: 10% DMSO >> 90% corn oil
Solubility: ≥ 3 mg/mL (7.29 mM); Clear solution
- Add each solvent one by one: 10% EtOH >> 40% PEG300 >> 5% Tween-80 >> 45% saline
Solubility: ≥ 3 mg/mL (7.29 mM); Clear solution
- Add each solvent one by one: 10% EtOH >> 90% (20% SBE-β-CD in saline)
Solubility: 3 mg/mL (7.29 mM); Suspended solution; Need ultrasonic
- Add each solvent one by one: 10% EtOH >> 90% corn oil
Solubility: ≥ 3 mg/mL (7.29 mM); Clear solution

BIOLOGICAL ACTIVITY

Description	Spirodiclofen is a broad spectrum acaricide acting via lipid biosynthesis inhibition (LBI) with no cross resistance to currently available acaricides and with additional insecticidal properties.
IC₅₀ & Target	Mite

REFERENCES

[1]. De Maeyer L, et al. The multiple target use of spirodiclofen (Envidor 240 SC) in IPM pomefruit in Belgium. Commun Agric Appl Biol Sci. 2009;74(1):225-232.

Caution: Product has not been fully validated for medical applications. For research use only.

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