# Data Sheet (Cat.No.T7088)



## Diflubenzuron

#### **Chemical Properties**

CAS No.: 35367-38-5

Formula: C14H9ClF2N2O2

Molecular Weight: 310.68

Appearance: no data available

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

## **Biological Description**

Description	Diflubenzuron (Larvakil) is a benzoyl-urea insecticide, found to be a potent inhibitor of melanosome synthesis in mouse melanoma cells. Diflubenzuron has also been shown to inhibit TCDD-induced CYP1A1 expression in HepG2 cells.	
Targets(IC50)	Cytochromes P450	

# **Solubility Information**

Solubility	H2O: Insoluble,	
	DMSO: 50 mg/mL (160.94 mM), Sonication is recommended.	
	(< 1 mg/ml refers to the product slightly soluble or insoluble)	

# Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.2187 mL	16.0937 mL	32.1875 mL
5 mM	0.6437 mL	3.2187 mL	6.4375 mL
10 mM	0.3219 mL	1.6094 mL	3.2187 mL
50 mM	0.0644 mL	0.3219 mL	0.6437 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

#### Reference

Norman J O, Meola S M. Inhibition of melanogenesis in B16-F1 melanoma cells after exposure to diflubenzuron.[J]. Antimicrobial Agents & Chemotherapy, 1983, 23(2):313-6.

Li Y, Sun H, Tian Z, et al. The determination of Plutella xylostella (L.) GSTs (PxGSTs) involved in the detoxification metabolism of Tolfenpyrad. Pest Management Science. 2020

Ledirac N, et al. Diflubenzuron, a benzoyl-urea insecticide, is a potent inhibitor of TCDD-induced CYP1A1 expression in HepG2 cells.[J]. Toxicol Appl Pharmacol, 2000, 164(3):273-279.

Li Y, Sun H, Tian Z, et al. The determination of Plutella xylostella (L.) GSTs (PxGSTs) involved in the detoxification metabolism of Tolfenpyrad[J]. Pest Management Science. 2020.

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