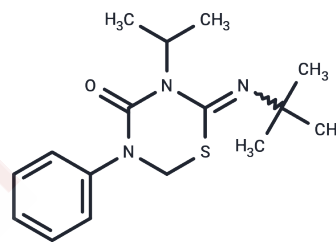


## Buprofezin

## Chemical Properties

CAS No. :	69327-76-0
Formula:	C <sub>16</sub> H <sub>23</sub> N <sub>3</sub> O <sub>3</sub> S
Molecular Weight:	305.44
Storage:	Powder: -20°C for 3 years   In solvent: -80°C for 1 year Actual storage temperature shall be subject to the COA.



## Biological Description

Description	Buprofezin (Applaud) is an insecticide used for control of insect pests such as mealybugs, leafhoppers and whitefly on vegetable crops.
Targets(IC50)	OXPHOS, Reactive Oxygen Species, ROS

## Solubility Information

Solubility	DMSO: 50 mg/mL (163.7 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (6.55 mM), Sonication is recommended. <i>Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.</i>

## Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.274 mL	16.3698 mL	32.7397 mL
5 mM	0.6548 mL	3.274 mL	6.5479 mL
10 mM	0.3274 mL	1.637 mL	3.274 mL
50 mM	0.0655 mL	0.3274 mL	0.6548 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.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

### Reference

Liu TX, Chen TY. Effects of the chitin synthesis inhibitor buprofezin on survival and development of immatures of *Chrysoperla rufilabris* (Neuroptera: Chrysopidae). *J Econ Entomol.* 2000 Apr;93(2):234-9.

Qureshi IZ, Bibi A, Shahid S, Ghazanfar M. Exposure to sub-acute doses of fipronil and buprofezin in combination or alone induces biochemical, hematological, histopathological and genotoxic damage in common carp (*Cyprinus carpio* L.). *Aquat Toxicol.* 2016 Oct;179:103-14.

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