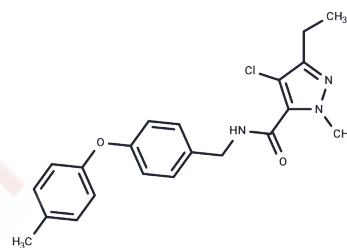


## Tolfenpyrad

## Chemical Properties

CAS No. :	129558-76-5
Formula:	C <sub>21</sub> H <sub>22</sub> ClN <sub>3</sub> O <sub>2</sub>
Molecular Weight:	383.87
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	Tolfenpyrad is an effective insecticide[1], used against pests that are resistant to existing insecticides such as organophosphates and carbamates.[2]
Targets(IC50)	Mitochondrial Metabolism, Antibacterial

## Solubility Information

Solubility	H <sub>2</sub> O: Insoluble, DMSO: 55 mg/mL (143.28 mM), Sonication is recommended. ( $< 1$ mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Corn Oil: 2.5 mg/mL (6.51 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	2.605 mL	13.0252 mL	26.0505 mL
5 mM	0.521 mL	2.605 mL	5.2101 mL
10 mM	0.2605 mL	1.3025 mL	2.605 mL
50 mM	0.0521 mL	0.2605 mL	0.521 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

Yajima T, Fujita M, Iijima K, et al. Effect of sample preparation on the estimation of residue levels of sprayed pesticides in separate analyses of turnip roots and leaves: inclusion or exclusion of the root-shoot junction[J]. *Journal of Pesticide Science*, 2017, 42.

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

Yamaguchi K, Hikiji W, Takino M, et al. Analysis of tolfenpyrad and its metabolites in plasma in a tolfenpyrad poisoning case[J]. *Journal of Analytical Toxicology*, 2012, 36(7):529-537.

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.

**Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins**

This product is for Research Use Only· Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E\_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481