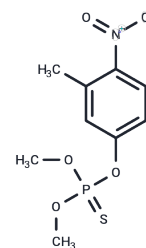


## Fenitrothion

## Chemical Properties

CAS No. :	122-14-5
Formula:	C <sub>9</sub> H <sub>12</sub> NO <sub>5</sub> PS
Molecular Weight:	277.23
Storage:	Pure form: -20°C for 3 years   In solvent: -80°C for 1 year

Actual storage temperature shall be subject to the COA.



## Biological Description

Description	Fenitrothion (Arbogal) is a broad-spectrum insecticide that shows reproductive toxicity in <i>Caenorhabditis elegans</i> , inhibiting cholinesterase and mites. It is commonly used in agriculture.
Targets(IC50)	Apoptosis,Akt,AMPK,Parasite,Cholinesterase (ChE),PI3K
In vivo	Following oral administration of 20 mg/kg Fenitrothion by gastric tube for 28 consecutive days, Fenitrothion significantly inhibited body weight gain and reduced epididymal weight and plasma cholinesterase activity compared to controls. Fenitrothion also had effects on sperm characteristics, including reduced sperm concentration, reduced sperm viability, and reduced proportion of normal sperm morphology compared to controls. [4]

## Solubility Information

Solubility	DMSO: Soluble, Ethanol: 160 mg/mL (577.14 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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### Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.6071 mL	18.0356 mL	36.0711 mL
5 mM	0.7214 mL	3.6071 mL	7.2142 mL
10 mM	0.3607 mL	1.8036 mL	3.6071 mL
50 mM	0.0721 mL	0.3607 mL	0.7214 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

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