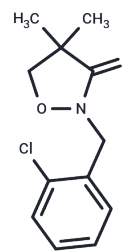


Clomazone

Chemical Properties

CAS No. :	81777-89-1
Formula:	C ₁₂ H ₁₄ ClNO ₂
Molecular Weight:	239.7
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	Clomazone (Magister) is an agricultural herbicide. The molecule consists of a 2-chlorobenzyl group bound to an N-O heterocycle called Isoxazole. Clomazone suppresses the biosynthesis of chlorophyll and other plant pigments.
Targets(IC50)	Others

Solubility Information

Solubility	DMSO: 245 mg/mL (1022.11 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 (8.34 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	4.1719 mL	20.8594 mL	41.7188 mL
5 mM	0.8344 mL	4.1719 mL	8.3438 mL
10 mM	0.4172 mL	2.0859 mL	4.1719 mL
50 mM	0.0834 mL	0.4172 mL	0.8344 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

Van Scoy AR, Tjeerdema RS. Environmental fate and toxicology of clomazone. Rev Environ Contam Toxicol. 2014; 229:35-49.

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Darwish M, Vidal V, Lopez-Lauri F, Alnaser O, Junglee S, El Maataoui M, Sallanon H. Tolerance to clomazone herbicide is linked to the state of LHC, PQ-pool and ROS detoxification in tobacco (*Nicotiana tabacum* L.). J Plant Physiol. 2015 Mar 1;175:122-30.

Menezes C, Leitemperger J, Murussi C, Toni C, Araújo Mdo C, Farias IL, Perazzo GX, Barbosa NV, Loro VL. Herbicide clomazone effects on δ -aminolevulinic acid activity and metabolic parameters in *Cyprinus carpio*. Bull Environ Contam Toxicol. 2014 Apr;92(4):393-8.

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