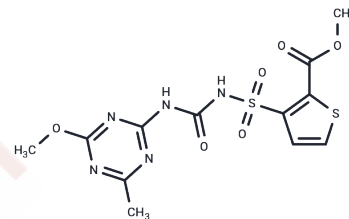


Thifensulfuron-methyl

Chemical Properties

CAS No. :	79277-27-3
Formula:	C ₁₂ H ₁₃ N ₅ O ₆ S ₂
Molecular Weight:	387.39
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	Thifensulfuron-methyl (Pinnacle) is a sulfonylurea (SU) herbicide, has an important role in the removal of broadleaf weeds.
Targets(IC50)	Others

Solubility Information

Solubility	DMSO: 50 mg/mL (129.07 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Saline: 5 mg/mL (12.91 mM),Solution. 10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (5.16 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	2.5814 mL	12.9069 mL	25.8138 mL
5 mM	0.5163 mL	2.5814 mL	5.1628 mL
10 mM	0.2581 mL	1.2907 mL	2.5814 mL
50 mM	0.0516 mL	0.2581 mL	0.5163 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

- Weisong Zhao, et al. Biodegradation of thifensulfuron-methyl by Ochrobactrum sp. in liquid medium and soil. *Biotechnol Lett.* 2015 Jul;37(7):1385-92.
- Cessna AJ, et al. Persistence of the sulfonylurea herbicides thifensulfuron-methyl, ethametsulfuron-methyl, and metsulfuron-methyl in farm dugouts (ponds). *J Environ Qual.* 2006 Oct 27;35(6):2395-401. Print 2006 Nov-Dec.
- Stry JJ, et al. Coupling of size-exclusion chromatography to liquid chromatography/mass spectrometry for determination of trace levels of thifensulfuron-methyl and tribenuron-methyl in cottonseed and cotton gin trash. *J AOAC Int.* 2000 May-Jun;83(3):651-9.
- Polati S, et al. HPLC-UV and HPLC-MSn multiresidue determination of amidosulfuron, azimsulfuron, nicosulfuron, rimsulfuron, thifensulfuron methyl, tribenuron methyl and azoxystrobin in surface waters. *Anal Chim Acta.* 2006 Oct 10;579(2):146-51. Epub 2006 Jul 22.

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