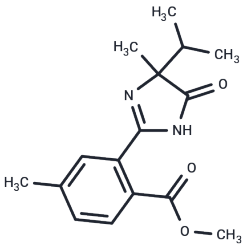
Data Sheet (Cat.No.T19989)

TargetMol

Imazamethabenz

Chemical Properties



CAS No. : 81405-85-8

Formula: C16H20N2O3

Molecular Weight: 288.34

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	Imazamethabenz is a herbicide. Imazamethabenz-methyl is used on cereals and sunflowers, especially against wild oat. Activity and selectivity are due to differential de-esterification to the active parent acid in target and crop species.
Targets(IC50)	Others

Solubility Information

Solubility	DMSO: Soluble, (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.4681 mL	17.3406 mL	34.6813 mL
5 mM	0.6936 mL	3.4681 mL	6.9363 mL
10 mM	0.3468 mL	1.7341 mL	3.4681 mL
50 mM	0.0694 mL	0.3468 mL	0.6936 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

Christiansen A, Peterson A, Anderson SC, Lass R, Johnson M, Nienow AM. Analysis of the Photodegradation of the Imidazolinone Herbicides Imazamox, Imazapic, Imazaquin, and Imazamethabenz-methyl in Aqueous Solution. J Agric Food Chem. 2015 Dec 23;63(50):10768-77. doi: 10.1021/acs.jafc.5b04663. Epub 2015 Dec 9. PubMed PMID: 26616105.

Pinna MV, Pusino A. Influence of the isomerism on the sorption of imazamethabenz-methyl by soil. Chemosphere. 2013 Apr;91(3):265-8. doi: 10.1016/j.chemosphere.2012.11.023. Epub 2012 Dec 6. PubMed PMID: 23219405.

Cessna AJ, Elliott JA, Bailey J. Leaching of three imidazolinone herbicides during sprinkler irrigation. J Environ Qual. 2012 May-Jun;41(3):882-92. doi: 10.2134/jeq2011.0198. PubMed PMID: 22565269.

Pintado S, Montoya MR, Mellado JM. Protonation-dissociation reactions of imazamethabenz-methyl and imazamethabenz-Acid in relation to their soil sorption and abiotic degradation. J Agric Food Chem. 2009 Dec 9;57 (23):11292-6. doi: 10.1021/jf902845h. PubMed PMID: 19904942.

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