

Product Data Sheet

Product Name: Tiafenacil

Cat. No.: GC63227

Chemical Properties

Cas. No. 1220411-29-9

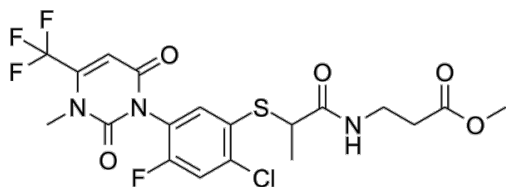
Formula $C_{19}H_{18}ClF_4N_3O_5S$ M.Wt 511.87

Solubility DMSO : 100 mg/mL (195.36 mM; Need ultrasonic) Storage Store at -20°C

General tips For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.

Structure



Background

Tiafenacil is a new protoporphyrinogen IX oxidase (PPO)-inhibiting herbicide, with IC50 values of 22 to 28 nM for various plant species, including amaranth (*Amaranthus tuberculatus*), soybean (*Glycine max*), arabidopsis (*Arabidopsis thaliana*), and rapeseed (*Brassica napus*)[1].

Tiafenacil has low oral and dermal acute toxicity[1]. In velvetleaf, Tiafenacil causes severe growth inhibition at 1 μ M and results in desiccation and death at 5 μ M[1].

Caution: Product has not been fully validated for medical applications. For research use only.

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[1]. Joonghyuk Park, et al. Biochemical and physiological mode of action of tiafenacil, a new protoporphyrinogen IX oxidase-inhibiting herbicide. Pestic Biochem Physiol. 2018 Nov;152:38-44.

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