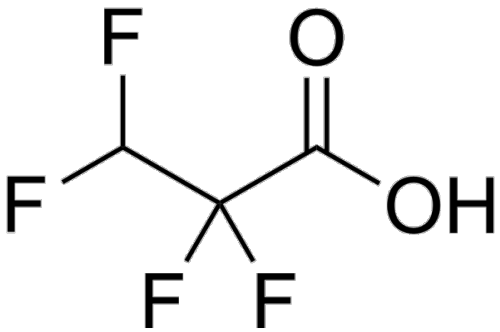
Product Data Sheet

Product Name: Flupropanate
Cat. No.: GC81449

Chemical Properties

Cas. No.	756-09-2		
Formula	$C_3H_2F_4O_2$	M.Wt	146.04
Solubility	DMSO: 200 mg/mL (1369.49 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

Flupropanate (2,2,3,3-Tetrafluoropropionic acid; 3H-Tetrafluoropropionic acid) is a soil-active selective herbicide and plant growth inhibitor that acts by inhibiting radicle growth and lipid biosynthesis in sensitive plants. Flupropanate exhibits high-efficiency control of Stipa weeds (such as Nassella neesiana and N. trichotoma) in pastures, and reduces the coverage of the invasive species Eragrostis curvula. Meanwhile, Flupropanate is sensitive to gramineous plants like ryegrass, but shows good selective tolerance to plantain, chicory and some leguminous plants. Studies show that in the protected area with Mediterranean climate in southwestern Australia, Flupropanate produces

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no significant non-target effects on native plant communities, functional groups or the endangered species Grevillea curviloba, indicating high ecological safety [1] [2].

In Vitro, Flupropanate (0.3-2200 g ai/ha; 12-15 days) reduces radicle growth of tested pasture and weed species in a dose-dependent manner, with ryegrass cultivars and Nassella spp. being highly susceptible, and broadleaf species including plantain, strawberry clover, chicory 'Chico', and lucerne being relatively tolerant[1].

References:

[1]. Lamoureaux S L, et al. Flupropanate in vitro pasture species susceptibilities[J]. New Zealand Plant Protection, 2015, 68: 105-111.
[2]. Gosper C R, et al. Control of African lovegrass by flupropanate in a flora conservation context[J]. Australian Journal of Botany, 2025, 73(5): BT25005.

Caution: Product has not been fully validated for medical applications. For research use only.
Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com
Address: 10292 Central Ave. #205, Montclair, CA, USA