

Data Sheet (Cat.No.TN2475)

1(10)-Aristolon-2-one

Chemical Properties

CAS No.:	28398-06-3
Formula:	C ₁₅ H ₂₂ O
Molecular Weight:	218.33
Appearance:	N/A
Storage:	0-4°C for short term (days to weeks), or -20°C for long term (months).

Biological Description

Description	1(10)-Aristolon-2-one has antifungal activity.
Targets(IC ₅₀)	Antifection: None
In vitro	METHODS AND RESULTS: Cultivated <i>Elionurus muticus</i> (Spreng.) Kunth (Gramineae) plant parts were steam distilled for essential oil and evaluated in-vitro for antifungal activity against <i>Candida albicans</i> , <i>C. krusei</i> and <i>Cryptococcus neoformans</i> using agar broth dilution and disc diffusion methods and the activity compared with commercial citral and <i>Cymbopogon citratus</i> DC (Stapf) (lemongrass) oils by measuring the growth inhibition diameter. <i>E. muticus</i> oils showed fungicidal activity with MIC and MFC values between 0.5-10µg/mL. <i>E. muticus</i> whole plant oil showed greater antifungal activity against <i>C. albicans</i> than citral and lemongrass oils. <i>E. muticus</i> whole plant essential oil contains citral and Δ 1(10)-Aristolon-2-one as major components, both are known antifungal compounds. CONCLUSIONS: Their unique presence in one plant extract could have significant impact in treating mycotic diseases and other opportunistic infections and for use in clinical aromatherapy and in complementary and alternative medicines.

Solubility Information

Solubility	< 1 mg/ml refers to the product slightly soluble or insoluble
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	4.580 mL	22.901 mL	45.802 mL
5 mM	0.916 mL	4.580 mL	9.160 mL
10 mM	0.458 mL	2.290 mL	4.580 mL
50 mM	0.092 mL	0.458 mL	0.916 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. The storage conditions and period of the stock solution: - 80 °C for 6 months; - 20 °C for 1 month. Please use it as soon as possible.

Reference

1. Antifungal Activity of the Essential Oil of *Elionurus Muticus* (Spreng) Kunth from Zimbabwe against *Candida albicans*, *C. krusei* and *Cryptococcus neoformans*. *Journal of Multidisciplinary Engineering Science and Technology (JMEST)*, 2016, 3(7):5331-5.

Inhibitors · Natural Compounds · Compound Libraries

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