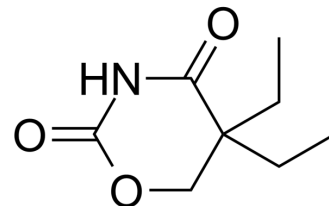


## Dioxone

Cat. No.:	HY-121469
CAS No.:	702-54-5
Molecular Formula:	C <sub>8</sub> H <sub>13</sub> NO <sub>3</sub>
Molecular Weight:	171.19
Target:	Others
Pathway:	Others
Storage:	4°C, protect from light * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



### SOLVENT & SOLUBILITY

In Vitro	DMSO : 100 mg/mL (584.15 mM; Need ultrasonic)						
	Preparing Stock Solutions	Solvent Concentration	Mass	1 mg	5 mg	10 mg	
				1 mM	5.8415 mL	29.2073 mL	58.4146 mL
				5 mM	1.1683 mL	5.8415 mL	11.6829 mL
				10 mM	0.5841 mL	2.9207 mL	5.8415 mL
Please refer to the solubility information to select the appropriate solvent.							
In Vivo	1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.5 mg/mL (14.60 mM); Clear solution						
	2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (14.60 mM); Clear solution						
	3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (14.60 mM); Clear solution						

### BIOLOGICAL ACTIVITY

Description	Dioxone is a substance possessing convulsant properties qualitatively similar to leptazol and bemegride. Dioxone is orally active <sup>[1]</sup> .
In Vitro	Dioxone is soluble in ethanol, ether, chloroform and propylene glycol. A 1 percent aqueous solution may be obtained at room temperature giving a pH of 4.3, and, with warming to 50°, 2 percent aqueous solutions may be prepared <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	Dioxone (0-30 mg/kg; i.v., i.p., oral, s.c.; once) induces convulsant action <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

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Animal Model:	CF-1 Mice and CF-Wistar rats <sup>[1]</sup>
Dosage:	0-30 mg/kg
Administration:	Intraperitoneal injection, once
Result:	In mice: The spontaneous activity was often reduced, always accompanied by hyperreactivity at 10 mg/kg, tremors, clonic convulsion and motor incoordination phenomena occurred after the administration of 30 mg/kg. In rats: Tremors and some isolated clonus of the muscles of the limbs were observed with 10 mg/kg, clonic convulsions occurred with doses above 15 mg/kg.

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## REFERENCES

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[1]. G MAFFII, et al. A new analeptic: 5, 5-diethyl-1, 3-oxazine-2,4-dione (Dioxone). J Pharm Pharmacol. 1961 Apr;13:244-53.

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA