Product Data Sheet

Product Name: POPSO
Cat. No.: GC67472

Chemical Properties

Cas. No.	68189-43-5		
Formula	$C_{10}H_{22}N_2O_8S_2$	M.Wt	362.42
Solubility	1M NaOH : 100 mg/mL (275.92 mM; ultrasonic and adjust pH to 11 with 1M NaOH)	Storage	Store at -20°C
General tips	For obtaining a higher solubility , please warm the tube at 37 ℃ and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20℃ 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	POPSO		

Background

POPSO is a **zwitterionic buffer**, increases osmolality and shows marked inhibition of anion uniport. POPSO inhibits chloride uniport with an $\mathbf{IC_{50}}$ value of 24 mM. POPSO enhances copper uptake and toxicity in alga, impairs mitochondrial inner membrane. The working pH range of POPSO sesquisodium salt is 7.2-8.5[1][2][3].

[1]. Ng LT, et al. Effect of buffers and osmolality on anion uniport across the mitochondrial inner membrane. Biochim Biophys Acta. 1993 Jun 10;1143(1):29-37.
[2]. Vasconcelos, et al. Influence of zwitterionic pH buffers on the bioavailability and toxicity of copper to the alga Amphidinium carterae. 2009 Nov;19(10):2542-2550.
[3]. Kebede N, et al. Electrogenerated chemiluminescence of tris(2,2' bipyridine)ruthenium(II) using common biological buffers as co-reactant, pH buffer and supporting electrolyte. Analyst. 2015 Nov 7;140(21):7142-5.

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