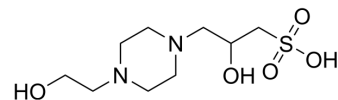


HEPPSO

| | | | |
|---------------------------|--|-------|---------|
| Cat. No.: | HY-D0874 | | |
| CAS No.: | 68399-78-0 | | |
| Molecular Formula: | C ₉ H ₂₀ N ₂ O ₅ S | | |
| Molecular Weight: | 268.33 | | |
| Target: | Biochemical Assay Reagents | | |
| Pathway: | Others | | |
| Storage: | Powder | -20°C | 3 years |
| | | 4°C | 2 years |
| | In solvent | -80°C | 2 years |
| | | -20°C | 1 year |



SOLVENT & SOLUBILITY

In Vitro

DMSO : 250 mg/mL (931.69 mM; Need ultrasonic)
 H₂O : 250 mg/mL (931.69 mM; Need ultrasonic)

| Preparing Stock Solutions | Solvent Concentration | Mass | | |
|---------------------------|-----------------------|-----------|------------|------------|
| | | 1 mg | 5 mg | 10 mg |
| | 1 mM | 3.7268 mL | 18.6338 mL | 37.2675 mL |
| | 5 mM | 0.7454 mL | 3.7268 mL | 7.4535 mL |
| | 10 mM | 0.3727 mL | 1.8634 mL | 3.7268 mL |

Please refer to the solubility information to select the appropriate solvent.

In Vivo

- Add each solvent one by one: PBS
Solubility: 110 mg/mL (409.94 mM); Clear solution; Need ultrasonic
- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
Solubility: ≥ 4.17 mg/mL (15.54 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
Solubility: ≥ 4.17 mg/mL (15.54 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil
Solubility: ≥ 4.17 mg/mL (15.54 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
Solubility: ≥ 2.5 mg/mL (9.32 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
Solubility: ≥ 2.5 mg/mL (9.32 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil
Solubility: ≥ 2.5 mg/mL (9.32 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

HEPPSO is a zwitterionic buffer. The working pH range of HEPPSO buffer is 7.1-8.5. HEPPSO displays relatively high ability to bind copper(II), has a pK_a of 7.84 at 2.0 mM buffer concentration^{[1][2]}.

REFERENCES

- [1]. Vasconcelos MT, et, al. Copper(II) complexation properties and surfactant activity of 3-[N, N-bis(2-hydroxyethyl)amino]-2-hydroxypropanesulfonic acid and N-(2-Hydroxyethyl)piperazine-N'-2-hydroxypropanesulfonic acid pH buffers which may affect trace metal speciation in in vitro studies. *Anal Biochem.* 1998 Dec 15; 265(2): 193-201.
- [2]. Mash HE, et, al. Complexation of copper by zwitterionic aminosulfonic (good) buffers. *Anal Chem.* 2003 Feb 1; 75(3): 671-7.

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

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