

产品名称：磺胺噻唑钠
 产品别名：Sulfathiazole sodium

生物活性：

Description

Sulfathiazole sodium is an organosulfur compound that has been used as a short-acting sulfa drug. Target: Antibacterial Sulfathiazole (20 μg/L) starts to be degraded between day 31 and day 38 in one of the two batch reactors containing different wastewater matrices. Sulfathiazole is degraded at a substantially faster rate than sulfamethoxazole or sulfamethazine in the nitrification process (S3) [1]. Recovery from spiked manure slurry samples is 64% for Sulfathiazole at pH 9. Sulfathiazole has acidity constant of pKa of 7.1 and retention times (tR) of 7.8. S/N values for Sulfathiazole are above 100 at the 1 mg/kg level [2]. Sulfathiazole sorption to inorganic sorbents exhibits pronounced pH dependence consistent with sorbate speciation and sorbent charge properties. Sulfathiazole cations are most important for sorption to clay minerals, followed by neutral species [3].

In Vitro:

DMSO : ≥ 59 mg/mL (212.77 mM)

* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	3.6062 mL	18.0310 mL	36.0620 mL
	5 mM	0.7212 mL	3.6062 mL	7.2124 mL
	10 mM	0.3606 mL	1.8031 mL	3.6062 mL

*请根据产品在不同溶剂中的溶解度选择合适的溶剂配制储备液；一旦配成溶液，请分装保存，避免反复冻融造成的产品失效。

储备液的保存方式和期限：-80℃，6 months；-20℃，1 month。-80℃ 储存时，请在 6 个月内使用，-20℃ 储存时，请在 1 个月内使用。

References

[1]. Perez, S., P. Eichhorn, and D.S. Aga, Evaluating the biodegradability of sulfamethazine, sulfamethoxazole, sulfathiazole, and trimethoprim at different stages of sewage treatment. Environ Toxicol Chem, 2005. 24(6): p. 1361-7.

[2]. Haller, M.Y., et al., Quantification of veterinary antibiotics (sulfonamides and trimethoprim) in animal manure by liquid chromatography-mass spectrometry. J Chromatogr A, 2002. 952(1-2): p. 111-20.

[3]. Kahle, M. and C. Stamm, Time and pH-dependent sorption of the veterinary antimicrobial sulfathiazole to clay minerals and ferrihydrite. Chemosphere, 2007. 68(7): p. 1224-31.