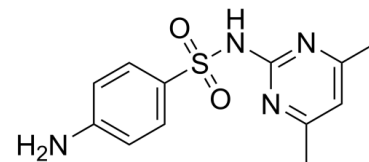


Data Sheet

| | |
|---------------------------|---|
| Product Name: | Sulfamethazine |
| Cat. No.: | CS-2722 |
| CAS No.: | 57-68-1 |
| Molecular Formula: | C ₁₂ H ₁₄ N ₄ O ₂ S |
| Molecular Weight: | 278.33 |
| Target: | Antibiotic; Bacterial |
| Pathway: | Anti-infection |
| Solubility: | DMSO : 100 mg/mL (ultrasonic) |



BIOLOGICAL ACTIVITY:

Sulfamethazine (Sulfadimidine) is an antimicrobial that is widely used to treat and prevent various animal diseases (such as gastrointestinal and respiratory tract infections). In China and the European Commission, the maximum residue level for Sulfamethazine in animal product is set at 100 µg/kg^{[1][2]}. IC50 & Target: Bacterial^[1] *In Vivo*: Sulfamethazine (80 mg/kg; intravenous injection; healthy female pigs) treatment significantly reduces α, β and AUC_{0-∞}, significantly increases t_{1/2α}, Vd and CIB, and upon a single intramuscular administration of 80 mg/kg of Sulfamethazine the absolute bioavailability in pigs is 1.01^[1].

References:

- [1]. VAN Poucke LSG, et al. Pharmacokinetics and Tissue Residues of Sulfathiazole and Sulfamethazine in Pigs. J Food Prot. 1994 Sep;57(9):796-801.
- [2]. Sheng Y J, et al. Production of chicken yolk IgY to sulfamethazine: comparison with rabbit antiserum IgG. Food and Agricultural Immunology. 2015, 26(3):305-316.

CAIndexNames:

Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)-

SMILES:

O=S(C1=CC=C(N)C=C1)(NC2=NC(C)=CC(C)=N2)=O

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

Tel: 610-426-3128

Fax: 888-484-5008

E-mail: sales@ChemScene.com

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