

Sulfadimidine and Trimethoprim

SCHEDULING STATUS: S4

CURRENTLY COMPOUNDED FORMULATIONS:

Active ingredient(s)	Injectable	Oral equine paste	Oral carnivore paste	Orals for exotics	Oral solution/suspension	Topical treatment	Shampoo	Capsules/Tablets	Oral powder
Sulfadimidine and Trimethoprim					✓				

REGISTERED PRODUCT/ TRADE NAME: Various formulations available

PHARMACOLOGICAL CLASSIFICATION: Potentiated sulfonamide antimicrobial^[1]

PHARMACOLOGICAL ACTION: On their own, sulfonamides are bacteriostatic and trimethoprim is bactericidal, but when they are used together, the potentiated sulfas are bactericidal. Potentiated sulfonamides inhibit enzymes in the folic acid pathway, thereby inhibiting bacterial thymidine synthesis. The sulfonamide blocks the conversion of para-aminobenzoic acid to dihydrofolic acid and trimethoprim blocks the conversion of dihydrofolic acid to tetrahydrofolic acid by inhibiting dihydrofolate reductase.^[1]

INDICATIONS: Used for the treatment of bacteria sensitive to potentiated sulfonamides.^[1]

DOSAGE AND DIRECTIONS FOR USE:

POULTRY:

In South Africa the common dose used in poultry is 40 mg/kg BM of the combined dose of sulfadimidine and trimethoprim for 3-5 days, given in drinking water.

WARNINGS/ PRECAUTIONS/ CONTRA-INDICATIONS:

- Do not use in patients with a history of sulfonamide sensitivity.^[1]
- Use with caution in patients with pre-existing hepatic disease.^[1]
- Do not use in pregnant and lactating animals.^[1]
- 5 days for the dosage recommended above, based on a 10 fold elimination half life of 10 hours plus a safety margin.^[2]

REFERENCES:

1. Plumb's Veterinary Drug Handbook, Sixth edition, by Donald C. Plumb
2. https://www.vetpharm.uzh.ch/wir/00000005/7681_03.htm