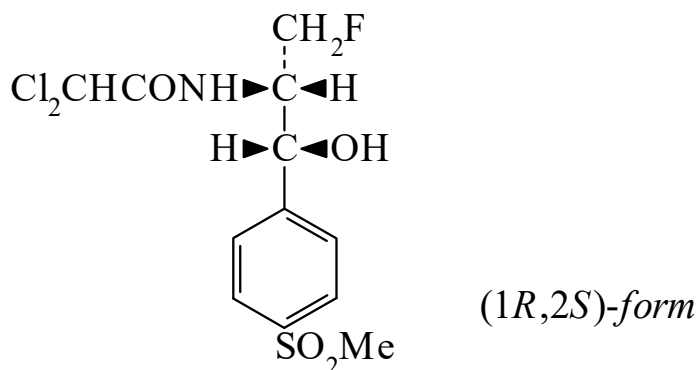




>>Entry Name: Florfenicol, BAN, INN, USAN

Synonym(s): 2,2-Dichloro-*N*-[1-(fluoromethyl)-2-hydroxy-2-[4-(methylsulfonyl)phenyl]ethyl]acetamide, 9Cl. 1-(4-Methylsulfonylphenyl)-2-dichloroacetamido-3-fluoro-1-propanol. Sch 25298



CAS Registry Number: 76639-94-6

Molecular Formula: C₁₂H₁₄Cl₂FNO₄S

Molecular Weight: 358.217

Accurate Mass: 357.000461

Percentage Composition: C 40.24%; H 3.94%; Cl 19.79%; F 5.30%; N 3.91%; O 17.87%; S 8.95%

Use/Importance: Veterinary antibacterial agent

Calculated Log P Data: Log P -0.12 (calc)

>>Variant: (1*R*,2*S*)-form

CAS Registry Number: 73231-34-2

Molecular Formula: C₁₂H₁₄Cl₂FNO₄S

Molecular Weight: 358.217

Accurate Mass: 357.000461

Percentage Composition: C 40.24%; H 3.94%; Cl 19.79%; F 5.30%; N 3.91%; O 17.87%; S 8.95%

Physical Description: Cryst. (EtOH aq.)

Melting Point: Mp 151-152°

Optical Rotation: $[\alpha]_{\text{D}}^{20} -18.4$ (c, 0.5 in DMF)

>>Variant: (1*S*,2*R*)-form

CAS Registry Number: 81588-76-3

Molecular Formula: C₁₂H₁₄Cl₂FNO₄S

Molecular Weight: 358.217

Accurate Mass: 357.000461

Percentage Composition: C 40.24%; H 3.94%; Cl 19.79%; F 5.30%; N 3.91%; O 17.87%; S 8.95%

Melting Point: Mp 153-154°

>>Variant: (1*R**S*,2*S**R*)-form

Synonym(s): DL-*threo*-form

CAS Registry Number: 105182-35-2

Molecular Formula: C₁₂H₁₄Cl₂FNO₄S

Molecular Weight: 358.217

Accurate Mass: 357.000461

Percentage Composition: C 40.24%; H 3.94%; Cl 19.79%; F 5.30%; N 3.91%; O 17.87%; S 8.95%

Physical Description: Fine cryst. (2-propanol)

Melting Point: Mp 150-151.5°

References:

Dorman, C.J. *et al.*, *Antimicrob. Agents Chemother.*, 1982, **22**, 912, (*pharmacol*)

U.S. Pat., 1982, *Schering*, 4 311 857; *CA*, **96**, 180950y, (*synth*)

Jommi, G. *et al.*, *Gazz. Chim. Ital.*, 1985, **115**, 653; 1986, **116**, 485, (*synth*)

Varma, K.J. *et al.*, *J. Vet. Pharmacol. Ther.*, 1986, **9**, 412, (*pharmacol*)

Pat. Coop. Treaty (WIPO), 1986, 86 01 799; *CA*, **105**, 208751q, (*synth*)

Bretz, K.N. *et al.*, *J. Vet. Pharmacol. Ther.*, 1987, **10**, 233, (*pharmacol*)

Tyson, R., *Chem. Ind. (London)*, 1988, 118, (*synth*)

Graham, R. *et al.*, *Eur. J. Clin. Microbiol.*, 1988, **7**, 691, (*activity*)

Hormazabal, V. *et al.*, *J. Chromatogr.*, 1993, **616**, 161, (*hplc*)

Wu, G. *et al.*, *J.O.C.*, 1997, **62**, 2996, (*synth*)