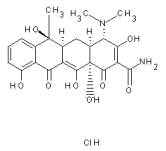

Formula: C22H25ClN2O8

MW: 480.9

CAS: 64-75-5

TNP NUMBER: TNP00257

MDL NUMBER: MFCD00085372

IUPAC: (4S,6S,12aS,4aS,5aS)-4-(dimethylamino)-3,6,10,12,12a-pentahydroxy-6-methyl-1,1 1-dioxo-4,5,6,12a,4a,5a-hexahydronaphthacene-2-carboxamide, chloride

Smiles:
C12=C([C]3(C(C(=C(O)[C@H]([C@@H]3(C[C@@H]2([C@@](O)(C)c2c(C1=O)c(O)ccc2)))N(C)C)C(=O)N)=O)O)O.Cl

Antibiotic substance produced by Streptomyces spp.

THERAPEUTIC CATEGORY: Antibacterial

ACCEPTORS: 8

DONORS: 7

ROTATION BONDS: 4

N+O: 10

Chiral Centers: 5

LogP: -0.31

LogS: -3.44

LIPINSKI: 3

Synonyms:
[4s-(4alpha,4aalpha,5aalpha,6beta,12aalpha)]-4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,6,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-2-naphthacenecarboxamide hydrochloride;ACHROMYCIN HCL;ACHROMYCIN HYDROCHLORIDE;DESCHLOROBIOMYCIN;TETRACYCLINE HCL;TETRACYCLINE HYDROCHLORIDE;10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-,monohydrochloride,[4s-(4alpha,4a;12,12a-pentahydroxy-6-methyl-1,11-dioxo-1monohydrochloride

CAS:64-75-5

MF:C22H25ClN2O8

MW:480.9

EINECS:200-593-8

Product Categories:Active Pharmaceutical Ingredients;Antibiotics for Research and Experimental Use;Biochemistry;Others (Antibiotics for Research and Experimental Use);Antibiotic Explorer;TA - TEAntibiotics;TetracyclinesAntibiotics;BacteriostaticAntibiotics;Chemical Structure;L - ZAlphabetic;Principle;TetracyclinesMore...Close...;Antibacterial;Antibiotics;Interferes with Protein SynthesisSpectrum of Activity;L - ZAntibiotics;Mechanism of Action;Antibiotics T-ZAntibiotics;AntibioticsAntibiotics;AntibioticsResearch Essentials;Antibiotics A to;Antibiotics by Application;Cell Culture;Chemical Structure Class;Core Bioreagents;Genetic Marker SelectionAntibiotics;Reagents and Supplements;Tetracyclines;Research Essentials Tetracycline hydrochloride

Chemical Properties: mp 220-223 C(lit.) alpha -252 (c=0.5, H2O) refractive index -253 (C=0.5, 0.1mol/L HCl) storage temp. 2-8C solubility H2O: 10 mg/mL as a stock solution. Stock solutions should be filtered sterilized and stored at -20C. Stable at 37C for 4 days. form powder Water Solubility 50 g/L Merck 14,9196 Stability:Stable. Incompatible with strong oxidizing agents.

CAS DataBase Reference: 64-75-5(

CAS DataBase Reference:) EPA Substance Registry System2-Naphthacenecarboxamide,

4-(dimethylamino)-1,4,4a,5, 5a,6,11,12a-octahydro-3,6, 10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-, monohydrochloride, (4S,4aS,5aS,6S,12aS)-(64-75-5) Xi,Xn Risk Statements 36/37/38-20/21/22 Safety Statements 26-36 WGK Germany 2 RTECS QI9100000 F 8-10-23
[4S-(4alpha,4aalpha,5aalpha,6beta,12aalpha)]-4-(Dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,6,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-2-naphthacenecarboxamide hydrochloride Tetracycline hydrochloride

Usage And Synthesis:

Chemical Properties: Yellow crystalline powder General DescriptionCrystals or fine bright yellow powder. pH of 2% aqueous solution: 2.1 - 2.3. Air & Water ReactionsWater soluble. Reactivity ProfileTetracycline hydrochloride is acidic. Reacts with strong oxidizing agents . Fire HazardFlash point data concerning Tetracycline hydrochloride are not available, however, Tetracycline hydrochloride is probably combustible. Tetracycline hydrochloride