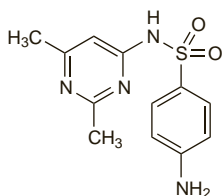


Sulfisomidine (BAN, rINN)

Sulfa-isodimérazine; Sulfaisodimidiini; Sulfaisodimidin; Sulfaisodimidine; Sulfaisodimidinum; Sulfasomidine; Sulfisomidini; Sulfisomidin; Sulfisomidina; Sulfisomidinum; Sulfizomidinas; Sulphasomidine; Szulfizomidin. N¹-(2,6-Dimethylpyrimidin-4-yl)sulphanilamide.

СульфизоМИДИН
C₁₂H₁₄N₄O₂S = 278.3.
CAS — 515-64-0.
ATC — J01EB01.



NOTE. Sulfadimethylpyrimidine has been used as a synonym for sulfisomidine, and sulphadimethylpyrimidine is sometimes used as a synonym for sulfadimidine (p.338). Care should be taken to avoid confusion between the two compounds, which are isomeric.

Pharmacopoeias. In *Eur.* (see p.vii).

Ph. Eur. 6.2 (Sulfisomidine). White or yellowish-white powder or crystals. Very slightly soluble in water; slightly soluble in alcohol and in acetone; dissolves in dilute solutions of alkali hydroxides and in dilute mineral acids. Protect from light.

Profile

Sulfisomidine is a short-acting sulfonamide with properties similar to those of sulfamethoxazole (p.340). It has been used topically for skin or vaginal infections and has also been given orally. The sodium salt has also been used.

Preparations

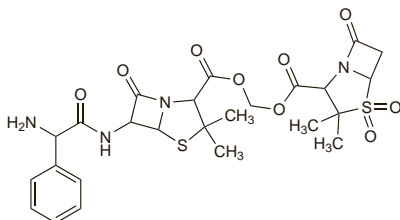
Proprietary Preparations (details are given in Part 3)

Thai. Aristamed†.

Sultamicillin (BAN, USAN, rINN)

CP-49952; Sultamicillin; Sultamicilina; Sultamicilline; Sultamicillinum; Sultamisilin; Sultamisillini; Sultamycylina. Penicillanoyloxymethyl (6R)-6-(p-2-phenylglycylamino)penicillanate S,S'-dioxide.

СультаМИЦИЛИН
C₂₅H₃₀N₄O₉S₂ = 594.7.
CAS — 76497-13-7.
ATC — J01CR04.
ATC Vet — QJ01CR04.



Pharmacopoeias. In *Eur.* (see p.vii).

Ph. Eur. 6.2 (Sultamicillin). A semi-synthetic product derived from a fermentation product. A white or almost white, slightly hygroscopic, crystalline powder. Practically insoluble in water and in alcohol; very slightly soluble in methyl alcohol. Store in airtight containers.

Sultamicillin Tosilate (BANM, rINNM)

Sultamicillin-tosylát; Sultamicillin Tosylate; Sultamicilline, tosilate de; Sultamicillini tosilas; Sultamicillin-tosilat; Sultamisillinitosilaatti; Sultamycylini tozylan; Tosilato de sultamicilina. Sultamicillin toluene-4-sulphonate.

СультаМИЦИЛИНА ТозиЛАТ
C₂₅H₃₀N₄O₉S₂·C₇H₈O₃S = 766.9.
CAS — 83105-70-8.

Pharmacopoeias. In *Chin.*

Eur. (see p.vii) and *Jpn* include the dihydrate.

Ph. Eur. 6.2 (Sultamicillin Tosilate Dihydrate; Sultamicillini Tosilas Dihydricus). A white or almost white, crystalline powder. Practically insoluble in water; sparingly soluble in alcohol. Store in airtight containers.

Profile

Sultamicillin is a prodrug of ampicillin (p.204) and of the beta-

lactamase inhibitor sulbactam (p.335); it consists of the two compounds linked as a double ester. During absorption from the gastrointestinal tract it is hydrolysed, releasing equimolar quantities of ampicillin and sulbactam.

Sultamicillin is given orally as tablets containing sultamicillin tosilate or as oral suspension containing sultamicillin. It is used in the treatment of infections where beta-lactamase-producing organisms might occur, including uncomplicated gonorrhoea, otitis media, and respiratory-tract and urinary-tract infections. The usual dose is 375 to 750 mg of sultamicillin (equivalent to 147 to 294 mg of sulbactam and 220 to 440 mg of ampicillin) twice daily. A single dose of sultamicillin 2.25 g with probenecid 1 g may be used for uncomplicated gonorrhoea.

When parenteral therapy is necessary a combined preparation of ampicillin with sulbactam is given.

◇ References.

- Friedel HA, *et al.* Sultamicillin: a review of its antibacterial activity, pharmacokinetic properties and therapeutic use. *Drugs* 1989; **37**: 491–522.
- Lode H. Role of sultamicillin and ampicillin/sulbactam in the treatment of upper and lower bacterial respiratory tract infections. *Int J Antimicrob Agents* 2001; **18**: 199–209.

Preparations

Proprietary Preparations (details are given in Part 3)

Arg.: Ampigen SB; Unasyna; Unasyna†; **Austria:** Unasyn; **Braz.:** Unasyn; **Chile:** Unasyna; **Ger.:** Unacid PD; **Gr.:** Begalin; **Hong Kong:** Unasyn; **Hung.:** Unasyn; **India:** Sulbacin; **Indon.:** Bactesyn; Cinam; Picyn; Unasyn; Vicillin-SX; **Ital.:** Unasyn; **Malaysia:** Sulbacin; Unasyn; **Mex.:** Pentrexyl-S12-H; Unasyna; **Philipp.:** Unasyn; **Pol.:** Unasyn; **Singapore:** Unasyn; **Spain:** Unasyn†; **Thai.:** Combid†; Sulam; Unasyn; **Turk.:** Alfasiid; Ampisid; Combid; Duobaktam; Duocid; Nobecid; Sulcid; Sultamat; Sultasid; Sultibac; **Venez.:** Fipexiam; Sinif; Sulamp; Sultamicina†; Sultamilan; Unasyn.

Multi-ingredient Cz.: Unasyn.

Taurolidine (BAN, rINN)

Taurolidina; Taurolidinum. 4,4'-Methylenebis(perhydro-1,2,4-thiadiazine 1,1-dioxide).

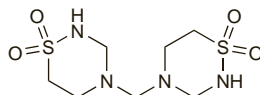
ТауролиДИН

C₇H₁₆N₄O₄S₂ = 284.4.

CAS — 19388-87-5.

ATC — B05CA05.

ATC Vet — QB05CA05.

**Profile**

Taurolidine is a broad-spectrum antibacterial. It is hydrolysed in aqueous solution to its monomeric form tauroltam and other metabolites, with the release of what was originally thought to be formaldehyde but is now considered to be activated methylene glycol or methylol groups, from which it is believed to derive its activity. Its antibacterial activity *in vitro* is modest but is reported to be enhanced in the presence of serum or urine; it is active against pathogens including *Staphylococcus aureus*, *Escherichia coli*, and *Pseudomonas aeruginosa*. Taurolidine is also reported to inactivate bacterial endotoxin.

Taurolidine is used in peritonitis; a solution containing 0.5% is used for irrigation and another containing 2% is available for instillation. It has been given experimentally as an intravenous infusion in the treatment of severe sepsis or endotoxic shock and in pancreatitis.

Preparations

Proprietary Preparations (details are given in Part 3)

Austria: Taurolin; **Ger.:** Taurolin; **Neth.:** Taurolin; **Switz.:** Taurolin.

Tazobactam Sodium (BANM, USAN, rINNM)

CL-307579; CL-298741 (tazobactam); Natrii Tazobactamum; Tazobactam sódicum; Tazobactam sodique; Tazobactamum natrium; Tazobaktam Sodium; YTR-830; YTR-830H (tazobactam). Sodium (2S,3S,5R)-3-methyl-7-oxo-3-(1H-1,2,3-triazol-1-ylmethyl)-4-thia-1-azabicyclo[3.2.0]heptane-2-carboxylate 4,4-dioxide.

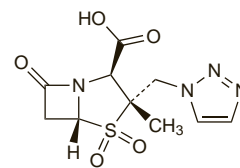
Натрий Тазобактам

C₁₀H₁₁N₄NaO₅S = 322.3.

CAS — 89786-04-9 (tazobactam); 89785-84-2 (tazobactam sodium).

ATC — J01CG02.

ATC Vet — QJ01CG02.



(tazobactam)

Profile

Tazobactam is a penicillanic acid sulfone derivative with beta-lactamase inhibitory properties similar to those of sulbactam (p.335) although it is regarded as more potent. It has the potential to enhance the activity of beta-lactam antibiotics against beta-lactamase-producing bacteria.

Tazobactam sodium is given intravenously with piperacillin sodium (p.315) for the treatment of bacterial infections. The pharmacokinetics of tazobactam and piperacillin are similar.

◇ References.

- Bush K, *et al.* Kinetic interactions of tazobactam with beta-lactamases from all major structural classes. *Antimicrob Agents Chemother* 1993; **37**: 851–8.
- Payne DJ, *et al.* Comparative activities of clavulanic acid, sulbactam, and tazobactam against clinically important beta-lactamases. *Antimicrob Agents Chemother* 1994; **38**: 767–72.
- Lee NLS, *et al.* beta-Lactam antibiotic and beta-lactamase inhibitor combinations. *JAMA* 2001; **285**: 386–8.

Preparations

Proprietary Preparations (details are given in Part 3)

Gr.: Zobactam; Zoracilin.

Multi-ingredient Arg.: Pipetexina; Tazonam; **Austral.:** Tazocin; **Austria:** Tazonam; **Belg.:** Tazocin; **Braz.:** Tazocin; Tazoxil†; Tazpen†; **Canada:** Tazocin; **Chile:** Tazonam; **Cz.:** Tazocin; **Denm.:** Tazocin; **Fin.:** Tazocin; **Fr.:** Tazocin; **Ger.:** Tazobac; **Gr.:** Bactalin; Gramenox; Oliten; Tazepen; Tazidron; Tazobion; Tazocin; Tazorex; **Hong Kong:** Tazocin; **Hung.:** Tazocin; **India:** Dibact†; Tazact; Tazofast; Tazopen; Zosyn; **Indon.:** Tazocin; **Irl.:** Tazocin; **Israel:** Tazocin; **Ital.:** Tazobac; Tazocin; **Malaysia:** Tazocin; **Mex.:** Tasovak; Tazocin; **Neth.:** Tazocin; **Norw.:** Tazocin; **NZ:** Tazocin; **Philipp.:** Tazocin; **Pol.:** Tazocin; **Port.:** Tazobac; **S.Afr.:** Tazobac; Tazocin; **Singapore:** Tazocin; **Spain:** Tazocel; **Swed.:** Tazocin; **Switz.:** Tazobac; **Thai.:** Tazocin; **Turk.:** Tazocin; **UK:** Tazocin; **USA:** Zosyn; **Venez.:** Tazoprit; Tazpen.

Teicoplanin (BAN, USAN, rINN)

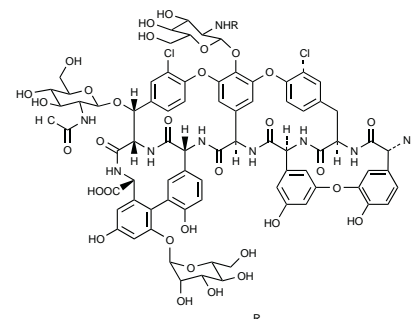
A-8327; DL-507-IT; L-12507; MDL-507; Teichomycin A₃; Teicoplanina; Téicoplanine; Teicoplaninum; Teikoplanini; Teikoplanin.

ТейкоПЛАНИН

CAS — 61036-62-2 (teichomycin); 61036-64-4 (teichomycin A₂).

ATC — J01XA02.

ATC Vet — QJ01XA02.



Teicoplanin A-1 (Z)-4-decanoic acid
A-2 8-methyldecanoic acid
A-3 n-decanoic acid
A-4 8-methyldecanoic acid
A-5 9-methyldecanoic acid

Description. A glycopeptide antibiotic obtained from cultures of *Actinoplanes teichomyceticus* or the same substance obtained by any other means.

Pharmacopoeias. In *Jpn*.

Adverse Effects and Precautions

Fever, skin rash and pruritus, and occasional bronchospasm and anaphylaxis have been reported with teicoplanin, but, in comparison with vancomycin (p.359), it appears to be better tolerated when given by rapid intravenous injection and, although erythema and flushing of the upper body have occurred, the 'red-man syndrome' has been reported less often. In addition, unlike vancomycin, teicoplanin does not appear to cause tis-