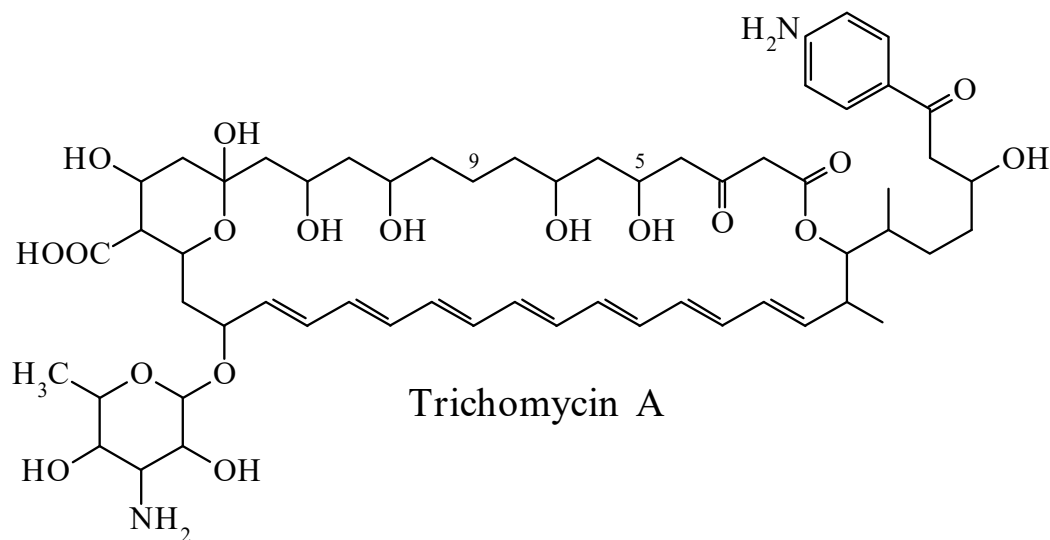




>>Entry Name: **Hachimycin**, BAN, INN

Synonym(s): Trichomycin, 9Cl. Cabimicina. Trichonat. Trichosept. Vegex. Heptafungin B



CAS Registry Number: 1394-02-1

Biological Source: Prod. by *Streptomyces hachijoensis* and *Streptomyces longisporolavendulae* (Heptafungin B)

Use/Importance: Antifungal agent used in treatment of trichomoniasis

Physical Description: Yellow cryst. or yellow powder (heptafungin)

UV: [neutral] $\lambda_{\max}$ 360 (); 380 (); 402 () (MeOH) (Heptafungin B)

Hazard & Toxicity: LD₅₀ (mus, ipr) 3.4 mg/kg

>>Variant: **Trichomycin A**

CAS Registry Number: 12698-99-6

Molecular Formula: C₅₈H₈₄N₂O₁₈

Molecular Weight: 1097.304

Accurate Mass: 1096.571918

Percentage Composition: C 63.49%; H 7.72%; N 2.55%; O 26.25%

Use/Importance: Active against yeasts, fungi and *Trichomonas vaginalis*

Physical Description: Amphoteric light-yellow plates

Melting Point: Mp 320°

Optical Rotation: $[\alpha]_{\text{D}}^{20} +129.8$ (c, 0.1 in DMF)

UV: [acid] $\lambda_{\max}$ 235 (ε 20900); 289 (ε 14400); 344 (ε 36700); 360 (ε 49000); 379 (ε 58000); 401 (ε 44600) (pH 2.1) (Derep) [base] $\lambda_{\max}$ 235 (ε 28400); 281 (ε 28000); 290 (ε 28900); 343 (ε 40200); 360 (ε 61600); 380 (ε 85100); 402 (ε 70900) (pH 12.4) (Derep) [neutral] $\lambda_{\max}$ 236 (ε 21500); 343 (ε 35600); 359 (ε 38500); 379 (ε 38700); 400 (ε 28400) (pH 6.8) (Derep)

Hazard & Toxicity: LD₅₀ (mus, ipr) 2.2 mg/kg

>>Derivative: 5-Deoxy, 9-hydroxy

Synonym(s): **Trichomycin B**

CAS Registry Number: 12699-00-2

Molecular Formula: C₅₈H₈₄N₂O₁₈

Molecular Weight: 1097.304

Accurate Mass: 1096.571918

Percentage Composition: C 63.49%; H 7.72%; N 2.55%; O 26.25%

Physical Description: Amphoteric yellow cryst.

Melting Point: Mp 300 dec.°

Solubility: BERDY SOL: Sol. Py, AcOH; fairly sol. MeOH, Me₂CO, butanol; poorly sol. H₂O, EtOAc, hexane

UV: [acid] $\lambda_{\max}$ 235 (ε 20900); 289 (ε 14400); 344 (ε 36700); 360 (ε 49000); 379 (ε 58000); 401 (ε 44600) (pH 2.1) (Derep) [base] $\lambda_{\max}$ 235 (ε 28400); 281 (ε 28000); 290 (ε 28900); 343 (ε 40200); 360 (ε 61600); 380 (ε 85100); 402 (ε 70900) (pH 12.4) (Derep) [neutral] $\lambda_{\max}$ 236 (ε 21500); 343 (ε 35600); 359 (ε 38500); 379 (ε 38700); 400 (ε 28400) (pH 6.8) (Derep) [neutral] $\lambda_{\max}$ 358 (); 377 (); 400 () (MeOH) (Berdy) [acid] $\lambda_{\max}$ 235 (ε 23674); 289 (ε 14796); 344 (ε 37593); 359 (ε 49210); 379 (ε 58636); 400 (ε 46032) (pH 2 buffer) (Berdy) [base] $\lambda_{\max}$ 234 (ε 27510); 343 (ε 40100); 369 (ε 60400); 379 (ε 81782); 401 (ε 67514) (pH 12 buffer) (Berdy) [neutral] $\lambda_{\max}$ 236 (ε 22490); 341 (ε 33000); 358 (ε 33428); 379 (ε 31455); 400 (ε 22687) (pH 7 buffer) (Berdy)

References: