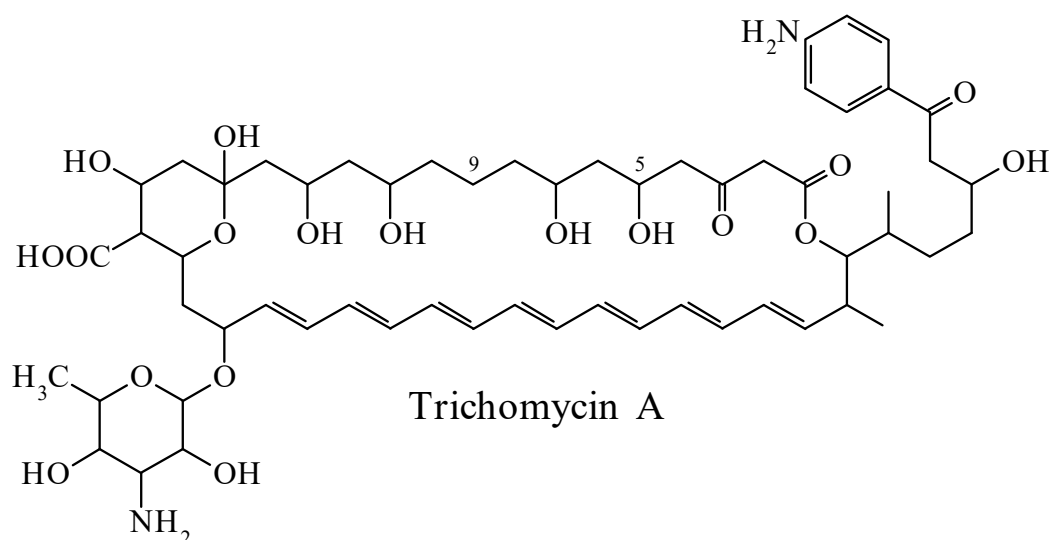




>>Entry Name: **Hachimycin**, BAN, INN

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:** LD<sub>50</sub> (mus, ipr) 3.4 mg/kg

>>Variant: **Trichomycin A**

CAS Registry Number: 12698-99-6

**Molecular Formula:** C<sub>58</sub>H<sub>84</sub>N<sub>2</sub>O<sub>18</sub>

**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:** LD<sub>50</sub> (mus, ipr) 2.2 mg/kg

>>Derivative: 5-Deoxy, 9-hydroxy

Synonym(s): **Trichomycin B**

CAS Registry Number: 12699-00-2

**Molecular Formula:** C<sub>58</sub>H<sub>84</sub>N<sub>2</sub>O<sub>18</sub>

**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, Me<sub>2</sub>CO, butanol; poorly sol. H<sub>2</sub>O, 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:**