

α-apo-oxytetracycline, EvoPure[®] PRODUCT DATA SHEET

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Product Name: α-apo-oxytetracycline, EvoPure®

Product Number: 0009

CAS Number: 18695-01-7 Molecular Formula: $C_{22}H_{22}N_2O_8$

Molecular Weight: 442.42

Solubility: Water: very slightly soluble (0.2 mg/mL)

Source: semi-synthetic

Storage Conditions: -20°C

Description: α-Apo-oxytetracycline, EvoPure® (oxytetracycline-related compound D) is an

oxytetracycline metabolite and impurity found in commercial oxytetracycline. It is formed via acid hydrolysis of oxytetracycline. It is an isomer of $\beta\text{-Apo-oxytetracycline}$ that forms readily in acidic and basic media. It can be used as a QC standard during stability studies of oxytetracycline and can be used to

study the degradation pathway and products of tetracyclines. $\boldsymbol{\alpha}$ -Apo-

oxytetracycline, EvoPure® is very slightly soluble in water.

We also offer:

 4-Epi-oxytetracycline, EvoPure® (oxytetracycline-related compound A) (O008)

 β -Apo-oxytetracycline, EvoPure® (oxytetracycline-related compound E) (O010)

Mechanism of Action: Oxytetracycline causes inhibition of protein synthesis. It binds to the 30S

ribosomal subunit and prevents the amino-acyl tRNA from binding to the A site

of the ribosome.

Spectrum: broad-spectrum, including Gram-negative and Gram-positive bacteria.

Technical Data: HPLC, NMR, FTIR, and MS analysis may be available. For more info, please

email info@toku-e.com.

References: Halling-Sorensen B, Sengelov G and Tjornelund J (2002) Toxicity of

tetracyclines and tetracycline degradation products to environmentally relevant bacteria, including selected tetracycline-resistant bacteria. Arch. Environ.

Contam. Toxicol. (2002) 42(3): 263-271 PMID 11910453

Richeng X et al (2010) Hydrolysis and photolysis of Oxytetracycline in aqueous

solution. J. Environ. Sci. and Health 45:73-81 PMID 20390934

Lykkeberg AK, Halling-Sørensen B, Cornett C, Tjørnelund J and Honoré HS (2004) Quantitative analysis of Oxytetracycline and its impurities by LC-MS-

MS. J. Pharm. Biomed. Anal. 34(2):325-332 PMID 15013146

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