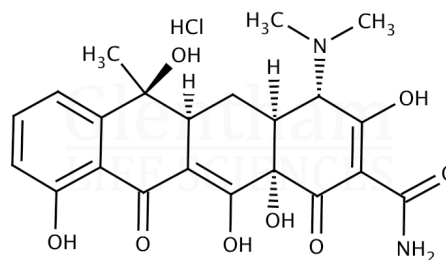


## Certificate of Analysis

|                   |                                       |
|-------------------|---------------------------------------|
| Product Name      | Tetracycline hydrochloride, USP grade |
| Glentham Code     | GP3828                                |
| CAS Number        | 64-75-5                               |
| EINECS            | 200-593-8                             |
| MDL Number        | MFCD00078142                          |
| Batch Number      | 134FGN                                |
| Molecular Weight  | 480.91                                |
| Molecular Formula | $C_{22}H_{24}N_2O_8 \cdot HCl$        |
| Storage Temp.     | -20°C                                 |



| Property  | Specification                                 | Batch 134FGN  |
|---|---|---------------|
| Physical Description                            | Yellow powder                                 | Yellow powder |
| Identification (IR)                             | To conform to standard                        | Conforms      |
| Identification                                  | To conform to USP                             | Conforms      |
| pH (1% in water)                                | 1.8 - 2.8                                     | 2.5           |
| Specific Optical Rotation ( $[\alpha]_{20/D}$ ) | -240.0 - -255.0 ° (c=0.5, 0.1M HCl)           | -243.6°       |
| Loss on Drying                                  | ≤ 2.0% (60°C, 2h, vac.)                       | 0.9%          |
| Epitetracycline                                 | ≤ 3.0%  | 1.5%          |
| 4-Epianhydrotetracyclin                         | ≤ 2.0%  | ≤ 0.5%        |
| Anhydrotetracycline                             | ≤ 0.5%  | 0.2%          |
| Crystallinity                                   | To meet the requirements                      | Conforms      |
| Potency (dried basis)                           | ≥ 900µg/mg ( $C_{22}H_{24}N_2O_8 \cdot HCl$ ) | 979µg/mg      |
| Pharmacopoeia Specification(s)                  | USP   | Conforms      |

|                       |            |
|-----------------------|------------|
| Specification Version | v1.1       |
| Manufacture Date      | 2023-10-12 |
| Re-Test Date          | 2031-01-03 |

Glentham Life Sciences confirm that the above referenced product conformed to the information displayed in this document on the quality release date. Please check [www.glentham.com](http://www.glentham.com) or contact us using the details above for the current version of this document.

This document was generated electronically and is therefore valid without signature. © Glentham Life Sciences Ltd, 2025