



CERTIFICATE OF ANALYSIS

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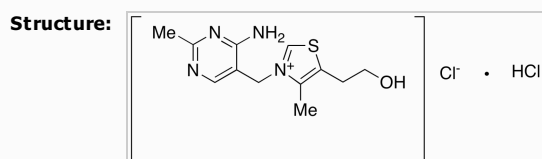
1. Identification

Catalogue Number: T344185

CAS Number: 67-03-8

Product: Thiamine Hydrochloride

Synonym: 3-[(4-Amino-2-methyl-5-pyrimidinyl)methyl]-5-(2-hydroxyethyl)-4-methyl-chloridethiazolium Hydrochloride; Aneurine Hydrochloride; Apate Drops; Beatine; Bedome; Begiolan; Benerva; Eskapen; Eskaphen; Thiamin Dichloride; Vinothiam; Vitamin B1 Hydrochloride; Vitaneuron;



Molecular Formula:

C₁₂H₁₇ClN₄OS • HCl

Molecular weight:

337.27

Source of Product:

N/A

Solubility:

DMSO (Slightly, Heated, Sonicated), Methanol (Slightly, Heated)

Lot Number: 2-FGD-570-1

Purity: 98%

Shipping Condition: This Product Is Stable To Be Shipped At Room Temperature

Storage Condition: 4°C

2. Warning

Warning 1:

Warning 2:

Warning 3:

3. Analytical Information

| Tests: | Specifications: | Results: |
|--------------------|--------------------------|-----------------------------------|
| Appearance | White to Off-White Solid | White to Off-White Solid |
| NMR | Conforms to Structure | Conforms |
| Elemental Analysis | Conforms | %C: 41.35, %H: 5.51, %N: 15.92 |
| HPLC Purity | Report Result | 98.80% (245 nm) |
| Chloride Content | Report Result | 20.1% |
| MS | Conforms to Structure | Conforms |
| Water Content | Report Result | ~3.2% based on Elemental Analysis |

Additional Information: N/A

Purity is based on the analytical results of the tests performed. NMR and Elemental Analysis (if available) may have an accuracy of ± 2%. Isotopic purity is based on mass distribution observed. The contents of the specifications are subject to change without advance notice, and the specification values displayed here are the most up to date values.

4. Signatures

| Reviewed By | Reviewed By | C of A Approved By | Test Date | Retest Date |
|---|---|---|-----------|-------------|
| Evan Burns | Toni Rantanen | Chanell Chu | 3/16/2022 | 3/14/2026 |
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