

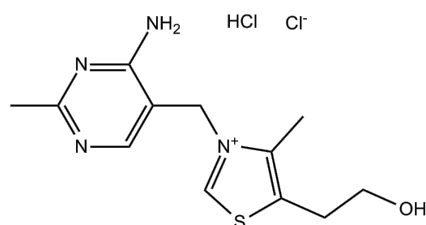
## Certificate of Analysis

Product Name: Vitamin B1 (Thiamine HCl) (Standard)  
Cat. No.: GC14040  
Batch No.: 3  
Chemical Name: 2-[3-[(4-amino-2-methylpyrimidin-5-yl)methyl]-4-methyl-1,3-thiazol-3-ium-5-yl]ethanol;chloride;hydrochloride

### PHYSICAL AND CHEMICAL PROPERTIES

Cas. No.: 67-03-8  
Molecular Formula:  $C_{12}H_{17}N_4OS.HCl$   
Molecular Weight: 337.27  
Storage: Store at  $-20^{\circ}C$

Chemical Structure:



### ANALYTICAL DATA

Appearance: A solid  
HNMR: Consistent with structure  
HPLC: Consistent with structure  
Purity: >99.00%  
Conclusion: The product has been tested and complies with the given specifications.

**Caution: Product has not been fully validated for medical applications. For research use only.**

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