

Certificate of Analysis

Product Name: **Thiamine Hydrochloride**
 Country of Origin: **China**
 Batch Number: **Varies**
 Manufacture Date: **Varies**
 Retest Date: **Varies**

Test Results Obtained by PureBulk

ITEMS	SPECIFICATIONS	RESULTS
Thiamine HCL (HPLC)	98-102%	99.22%
Loss on Drying (USP<731>)	≤5%	0.13%
Aerobic Plate Count	≤1000 cfu/g	<20 cfu/g
Coliforms	≤100 cfu/g	<20 cfu/g
<i>E. Coli</i>	Negative	Absent
<i>Staph aureus</i>	Negative	Absent
Yeast & Mold	≤100 cfu/g	<20 cfu/g
<i>Salmonella</i>	Negative	Absent
<i>Pseudo. aeruginosa</i>	Negative	Absent
Conclusion (PureBulk):	This product conforms to standards	

The following information is an indirect translation of information provided from the Manufacturer's Certificate of Analysis, and should not be used solely as an instrument for strict quality control.

ITEMS	SPECIFICATIONS	RESULTS
Appearance	White crystals or almost white crystalline powder	White crystalline powder
Identification	(1) Should be positive reaction (2) Consistent with the reference IR spectra	(1) Positive Reaction (2) Consistent with the reference IR spectra
Appearance of Solution	Clear, no more color than reference solution Y7 or GY7	Clear, no more color than reference solution Y7
pH	2.7-3.3	3.0
Sulphates	≤300 ppm	<300 ppm
Limit of Nitrate	No brown ring is produced at the junction of the two layers	No brown ring is produced at the junction of the two layers
Lead (Pb)	≤2 ppm	<2 ppm
Cadmium (Cd)	≤1.0 ppm	<1.0 ppm
Mercury (Hg)	≤0.1 ppm	<0.1 ppm
Arsenic (As)	≤1.0 ppm	<1.0 ppm
Residue on Ignition	≤0.1%	0.06%
Absorbance of Solution	≤0.025	0.011
Methanol	≤0.3%	<0.3%
Ethanol	≤0.5%	<0.5%
Impurity A	≤0.15%	0.02%
Impurity B	≤0.3%	0.01%
Impurity C	≤0.15%	0.02%
Any Impurity	≤0.1%	0.01%
Total Impurities	≤0.5%	0.11%
Chromatographic Purity	≤1.0%	0.1%
Conclusion (Manufacturer):	This product conforms to enterprise standards	

Additional Information: Allergen Free || BSE/TSE Free || Gluten-Free || Vegan/Vegetarian

Composition: Thiamine HCL 98.5-101.0%

Storage Conditions: **Keep in sealed container under 25°C.**
Keep away from strong light, heat and moisture.

Purebulk.Inc verifies that the information contained herein is true and correct to the best of our knowledge.

Verified By: Candace Gibson / Nicole Rammage

(This document was produced electronically and is valid without signature.)