CERTIFICATE OF ANALYSIS

Product Description THIAMINE HYDROCHLORIDE

Product Number T390

Lot Number 09A0390007

Storage Temperature Room Temperature

Molecular Weight 337.27

Formula C₁₂H₁₇ClN₄OS•HCl

CAS Number 67-03-8

Physiochemical Specifications:

TEST	SPECIFICATION	RESULTS
Solubility	Soluble in Water @ 10 mg/mL	Passes
pН	Under Development	3.18
Physical Appearance		
Color*	RM-1 to RM-3, RM-31	RM-31 White
Texture	Fine Powder	Fine Powder
Solution Appearance		
Clarity	Clear	Clear
Color	Colorless	Colorless
Average Time to Dissolve	Within 1 min	Passes
Insolubles	None	Passes
Purity	Minimum 98.0%	99.7%
Water Content	For Information Only	3.7%

^{*} Product color based upon comparisons between sample and standardized color wheel (Benjamin Moore® Color PreviewTM).

Biological Testing:

Test Concentration: 10.0 mg/L

TEST SPECIFICATION	PLANT CELL LINE	RESULTS
Supports and/or facilitates plant growth and/or shoot proliferation in two or	Boston Fern	Passes
more plant tissue cultured lines with no morphological aberrations to plants	Syngonium	Passes

The material described in this certificate is synthetic. No animal- or plant-derived components were used in the manufacture of this product.

Phyto Technology Laboratories, LLC provides the above information intended to be used only as a guide to the appropriate handling of this material by a properly trained person. Phyto Technology Laboratories shall not be held liable for any damage resulting from handling or from contact with the above product. This product is intended for LABORATORY USE ONLY. Our products may NOT BE USED as drugs, cosmetics, agricultural or pesticidal products, food additives or as household chemicals.

Recommended Shelf Life Date: January 2017

Gary Seckinger, Ph.D.

PhytoTechnology Laboratories, LLC

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