

CERTIFICATE OF ANALYSIS

Product Description L-THREONINE
Product Number T857
Lot Number 11D0857002
Storage Temperature -20 - 0 °C
Molecular Weight 169.6
Formula $C_5H_{11}O_3N \cdot HCl$
CAS Number 39994-75-7

Physiochemical Specifications:

TEST	SPECIFICATION	RESULTS
Solubility	Soluble in Water @ 10 mg/mL	Passes
pH	Under Development	3.56
Physical Appearance Color* Texture	RM-1 to RM-3 or RM-31 Fine Powder, may form clumps	RM-31 White Fine Powder, forms clumps
Solution Appearance Clarity Color	Clear Colorless	Clear Colorless
Average Time to Dissolve	Within 1 minute	Passes
Insolubles	None	Passes
Purity	Minimum 99.0 %	99.1%

* Product color based upon comparisons between sample and standardized color wheel (Benjamin Moore® Color Preview™).

Biological Testing:

Test Concentration: 100 mg/L

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

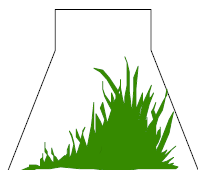
The material described in this certificate is synthetic. No animal- or plant-derived components were used in the manufacture of this product.

PhytoTechnology Laboratories® provides the above information intended to be used only as a guide to the appropriate handling of this material by a properly trained person. PhytoTechnology 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: April 2013



Gary Seckinger, Ph.D.



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