CERTIFICATE OF ANALYSIS

Product Description	L-ASPARTIC ACID, FREE ACID (S)-AMINOBUTANEDIOIC ACID
Product Number	A117
Lot Number	11F0117002
Storage Temperature	Room Temperature
Molecular Weight	133.10
Formula	$C_4H_7NO_4$
CAS Number	56-84-8

Physiochemical Specifications:

TEST	SPECIFICATION	RESULTS
Solubility	Soluble in Water @ 10 mg/mL	Passes
pH	Under Development	3.22
Physical Appearance Color* Texture	 RM-1 to RM-3, or RM-31 Crystalline Powder	 RM-31 White Crystalline Powder
Solution Appearance Clarity Color	 Clear Colorless	 Clear Colorless
Average Time to Dissolve	Within 15 min	Passes
Insolubles	None	Passes
Purity	Minimum 98.5%	99.57%
Loss On Drying	For Information Only	0.14%

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

Biological Testing:

Test Concentration: 100.0 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	Tobacco callus	Passes
	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® 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: June 2019

Gary Seckinger, Ph.D.

P*hyto*Technology Laboratories®
Dedicated to Growth

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Created on 6 July 2011 PN