CERTIFICATE OF ANALYSIS

Product Description	MURASHIGE & SKOOG MODIFIED VITAMIN SOLUTION (1000x) CONTAINS ADDITIONAL THIAMINE HCl
Product Number	M557
Lot Number	16F0557011
Storage Temperature	2-6 ˚C

Physiochemical Specifications:

TEST	SPECIFICATION	RESULTS
Solubility	Miscible with Water	Passes
pH (Neat)	3.2-4.2	3.7
Physical Appearance Color Texture	 Colorless Clear Liquid	 Colorless Clear Liquid
Insolubles	None	Passes*
Sterility by USP<71>	Sterile	Passes

*Myo-Inositol may precipitate out of solution as the product ages in cold storage. This will re-dissolve upon warming and does not detrimentally affect the product.

Biological Testing:

Test Concentration: 1.0 mL/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	African Violet	Passes
	Perilla	Passes

The material described in this certificate was manufactured in the United States of America and 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: July 2019

Gary Seckinger, Ph.D.

P*hyto*Technology Laboratories®
Dedicated to Growth

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