CERTIFICATE OF ANALYSIS

Product Description	D-(+) MANNOSE
Product Number	M486
Lot Number	15G0486015
Storage Temperature	Room Temperature
Molecular Weight	180.16
Formula	$C_6H_{12}O_6$
CAS Number	3458-28-4

Physiochemical Specifications:

TEST	SPECIFICATION	RESULTS
Solubility	Soluble in Water @ 100 mg/mL	Passes
pH	Under Development	4.9
Physical Appearance Color* Texture	 PM-1 to PM-4 Fine Powder	 PM-4 White Fine Powder
Solution Appearance Clarity Color	 Clear Colorless	 Clear Colorless
Average Time to Dissolve	For Information Only (Approx. 3 min)	3 mins
Insolubles	None	Passes
FTIR	Conforms to Structure	Passes
Purity by HPLC	Minimum 98.0%	99.30%

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

Biological Testing:

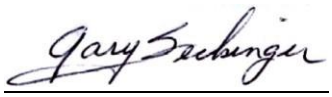
Test Concentration: 1.0 g/L

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	Cape Primrose	Passes
	Tobacco Callus	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: July 2023



Gary Seckinger, Ph.D.

P*hyto*Technology Laboratories®
Dedicated to Growth

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Created on 31 August 2015 JN