CERTIFICATE OF ANALYSIS

Product Description	AGAR, PLANT TC Micropropagation Grade - Gracilaria
Product Number	A111
Lot Number	SUS0111162
Storage Temperature	Room Temperature
CAS Number	9002-18-0
CAS Nulliber	9002-18-0

Physiochemical Specifications:

TEST	SPECIFICATION	RESULTS	
Solubility	Soluble in Water Heated to Boiling	Passes	
pH (8.00 g/L)	5.5 - 9.5	5.5	
Physical Appearance			
Color*	2016-70 to 2021-70, 2151-70 to		
	2156-70, 2150-60 to 2154-60,		
	HC-32, or HC-36	2154-60 Cream	
Texture	Fine to Coarse Powder	Fine Powder	
Solution Appearance After Heating			
Clarity	Clear to Slightly Hazy	Slightly Hazy	
Color	Colorless to Slight Yellow Tint	Slight Yellow Tint	
Insolubles	None	Passes	
Gel Strength	Minimum 900 g/cm ²	1130 g/cm ²	
	Forms Gel When Suspend in		
Gel Formation	Appropriate Solvent and Heated to	Passes	
	Boiling		
Compression Break Earon Test	Force Gauge Measurement (g/cm ²⁾	$421 a/am^2$	
Compression Break Force Test	For Information Only	431 g/cm^2	

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

Biological Testing:

Test Concentration: 8.0 g/L

TEST SPECIFICATION	PLANT CELL LINE	RESULTS
This product is tested with two or more plant cell lines to ensure proper gelling, support,	Lily	Passes
and that there are no phytotoxic impurities that would cause morphological aberrations to plants.	Perilla "Fantasy"	Passes

The material described in this certificate is plant-derived (Seaweed). No animal-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.

Date of Release: 15-September-2017 Recommended Shelf Life Date: September- 2025

David S. Hart Technical Director



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*Phyto*Technology Laboratories®

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