

CERTIFICATE OF ANALYSIS

Product Description AGAR, MICROPROPAGATION/PLANT TISSUE CULTURE GRADE
Product Number A111
Lot Number 04G11123
Storage Temperature Room Temperature
Molecular Weight NA
Formula NA
CAS Number 9002-18-0

Physiochemical Specifications:

TEST	SPECIFICATION	RESULTS
Solubility	Partially Soluble in Water	Partially Soluble in Water
pH (8.00 g/L)	6.5 – 9.5	7.89
Physical Appearance Color*	2018-70 (Milky Way) 2016-70 to 2021-70, HC-36, or 2151-70 to 2156-70	2154-70 (Vanilla Ice Cream)
Texture	Fine to Grainy Powder	Grainy Powder
Solution Appearance Clarity Color*	Nontransparent, Grainy 2144-50 (Silken Pine) 2143-50 to 2145-50 or 2144-60 to 2149-60	Nontransparent, Grainy 2144-50 (Silken Pine)
Average Time to Dissolve	Within 1 min	Within 1 min
Precipitation Formation	None	None
Gel Strength	>900 gm/cm ²	1400 gm/cm ²
Gelling Point	35-40° C	38° C

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

Biological Testing:

TEST SPECIFICATION	PLANT CELL LINE	RESULTS
This product is commonly used as a means of support in plant tissue culture. This product is tested with two or more plant cell lines to ensure proper gelling, support, and that there are no cytotoxic/phytotoxic effects.	Boston Fern	Passes-Gelled properly, supported plant tissue and growth with no morphological aberrations to plants
	Hosta	Passes-Gelled properly, supported plant tissue and growth with no morphological aberrations to plants

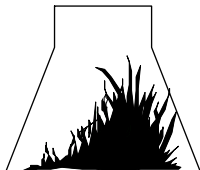
The material described in this certificate was manufactured in the United State of America and is plant derived in nature. No animal components were used in the manufacture of this product.

PhytoTechnology Laboratories, LLC 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: July 2009

Emily Burdick

Quality Assurance Manager



PhytoTechnology
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Dedicated to Growth

PhytoTechnology Laboratories, LLC

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