## **CERTIFICATE OF ANALYSIS**

| Product Description | AGAR, PLANT TC<br>Micropropagation Grade - Gracilaria |
|---------------------|---|
| Product Number      | A111  |
| Lot Number          | AHR0111170  |
| Storage Temperature | Room Temperature                                      |
| CAS Number          | 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                                   | 7.7                    |  |
| Physical Appearance               |   |                        |  |
| Color*                            | 2016-70 to 2021-70, 2151-70 to              |                        |  |
|                                   | 2156-70, 2150-60 to 2154-60,                |                        |  |
|                                   | HC-32, or HC-36                             | 2153-70 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 <sup>2</sup>               | 1120 g/cm <sup>2</sup> |  |
|                                   | Forms Gel When Suspend in                   |                        |  |
| Gel Formation                     | Appropriate Solvent and Heated to           | Passes                 |  |
|                                   | Boiling                                     |                        |  |
| Compression Break Fores Test      | Force Gauge Measurement (g/cm <sup>2)</sup> | 301 g/cm <sup>2</sup>  |  |
| Compression Break Force Test      | For Information Only                        | 501 g/cm               |  |

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

## **Biological Testing:**

Test Concentration: 8.0 g/L

| TEST SPECIFICATION  | PLANT CELL LINE | RESULTS |
|---|-----------------|---------|
| This product is tested with two or more plant<br>cell lines to ensure proper gelling, support,<br>and that there are no phytotoxic impurities<br>that would cause morphological aberrations<br>to plants. | African Violet  | Passes  |
|   | Sugar Cane      | Passes  |

The material described in this certificate is plant-derived (Seaweed). No animal-derived components were used in the manufacture of this product.

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Date of Release: 6-April-2018 Recommended Shelf Life Date: April 2026

David S. Hart Technical Director



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 Mailing Address:
 P.O. Box 12205, Shawnee Mission, KS 66282-2205

 Phone:
 1-888-749-8682 (1-913-341-5343 Outside the USA & Canada)

 Fax:
 1-888-449-8682 (1-913-341-5442 Outside the USA & Canada)

 Visit our Web Site at http://www.phytotechlab.com

