CERTIFICATE OF ANALYSIS

Product Description MURASHIGE & SKOOG MODIFIED MEDIUM

ARABIDOPSIS CULTURE MEDIUM

Product Number M550

Lot Number 15A0550006

Storage Temperature 2-8°C

Physiochemical Specifications:

| TEST | SPECIFICATION | RESULTS |
|--------------------------|---------------------------------|--------------------|
| Solubility | Soluble in Water | Passes |
| pH (24.44 g/L) | 3.0 - 5.5 | 4.8 |
| Physical Appearance | | |
| Color* | PM-1 to PM-4 | PM-4 White |
| Texture | Fine Powder | Fine Powder |
| Solution Appearance | | |
| Clarity | Clear to Slightly Hazy | Clear |
| Color | Colorless to Slight Yellow Tint | Slight Yellow Tint |
| | For Information Only | |
| Average Time to Dissolve | (Approx. 10 mins) | 10 mins |
| Insolubles | None to Few | Passes-Few |
| Moisture | For Information Only | 0.90% |

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

Biological Testing:

| TEST SPECIFICATION | PLANT CELL LINE | RESULTS |
|---|-----------------|---------|
| Supports and/or facilitates plant growth and/or shoot proliferation in two or | Ajuga | Passes |
| more plant tissue cultured lines with no morphological aberrations to plants | Tobacco Callus | 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.

Date of Release: 18-June-2018

Recommended Shelf Life Date: December 2020

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