# CERTIFICATE OF ANALYSIS

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| Product Description | MURASHIGE & SKOOG MACRONUTRIENT SALT BASE<br>1x MACRONUTRIENT SALTS |
| Product Number | M502 |
| Lot Number | 16E0502022 |
| Storage Temperature | 2-6 ˚C |

## Physiochemical Specifications:

| TEST | SPECIFICATION | RESULTS |
|---|---|---|
| Solubility | Soluble in Water | Passes |
| pH (4.23 g/L) | 4.1-5.6 | 5.1 |
| Physical Appearance<br>Color*<br><br>Texture | <br>2142-70 to 2146-70,<br>PM-1 to PM-4<br>Fine to Coarse Powder | <br>PM-4 White<br><br>Fine Powder |
| Solution Appearance<br>Clarity<br>Color | <br>Clear<br>Colorless | <br>Clear<br>Colorless |
| Average Time to Dissolve | For Information Only<br>(Approx. 5 min) | 5 min |
| Insolubles | None | Passes |
| Moisture | For Information Only | 0.79% |

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

## Biological Testing:

| 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 | Perilla | Passes |
| | Dianthus | 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.**

Recommended Shelf Life Date: June 2019

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*Created on 14 June 2016 JN*