

# CERTIFICATE OF ANALYSIS

Product Description      CITRIC ACID, ANHYDROUS  
Product Number          C277  
Lot Number                09C0277004  
Storage Temperature      Room Temperature  
Molecular Weight        192.14  
Formula                    C<sub>6</sub>H<sub>8</sub>O<sub>7</sub>  
CAS Number                77-92-9

## Physiochemical Specifications:

| TEST                                     | SPECIFICATION                             | RESULTS                          |
|--|---|----------------------------------|
| Solubility                               | Soluble in Water @ 10 mg/mL               | Passes                           |
| pH                                       | Under Development                         | 2.18                             |
| Physical Appearance<br>Color*<br>Texture | RM-1 to RM-3, RM-31<br>Crystalline Powder | RM-1 White<br>Crystalline Powder |
| Solution Appearance<br>Clarity<br>Color  | Clear<br>Colorless                        | Clear<br>Colorless               |
| Average Time to Dissolve                 | Within 1 min                              | Passes                           |
| Insolubles                               | None                                      | Passes                           |
| Purity                                   | Minimum 99.0%                             | 99.9%                            |
| Water Content                            | For Information Only                      | 0.07%                            |

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

## Biological Testing:

Testing Concentration: 100 mg/L

| 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 | Hosta           | Passes  |
|  | Tobacco callus  | Passes  |

The material described in this certificate is synthetic. No animal- or plant-derived 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: March 2017



Gary Seckinger, Ph.D.



PhytoTechnology  
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Dedicated to Growth

### **PhytoTechnology Laboratories, LLC**

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Created on 17 April 2009