

# CERTIFICATE OF ANALYSIS

Product Description      CALCIUM GLUCONATE, MONOHYDRATE  
Product Number        C231  
Lot Number              15G0231014  
Storage Temperature    Room Temperature  
Molecular Weight       448.39  
Formula                  $C_{12}H_{22}O_{14}Ca \cdot H_2O$   
CAS Number             299-28-5

## Physicochemical Specifications:

TEST	SPECIFICATION	RESULTS
Solubility <sup>1</sup>	Soluble in Hot Water @ 2.5 mg/mL	Passes
pH	Under Development	6.1
Physical Appearance Color* Texture	PM-1 to PM-4 Fine Powder to Granules	PM-4 White Granules
Solution Appearance Clarity Color	Clear Colorless	Clear Colorless
Average Time to Dissolve	For Information Only (Approx. 5 min)	15 mins
Insolubles	None	Passes
FTIR	Conforms to Structure	Passes
Purity	For Information Only	99.30 %
Heavy Metals	For Information Only	<10 PPM

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

<sup>1</sup> When added to tissue culture medium, this product should first be dissolved in water. Solubility in salt solution (e.g. TC medium) may be limited.

## Biological Testing:

Test Concentration: 350.0 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	African Violet	Passes
	Ajuga	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® 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 2023



Gary Seckinger, Ph.D.



PhytoTechnology  
Laboratories®  
Dedicated to Growth

### **PhytoTechnology Laboratories®**

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>



Created on 13 August 2015 JN