



Product Information Sheet

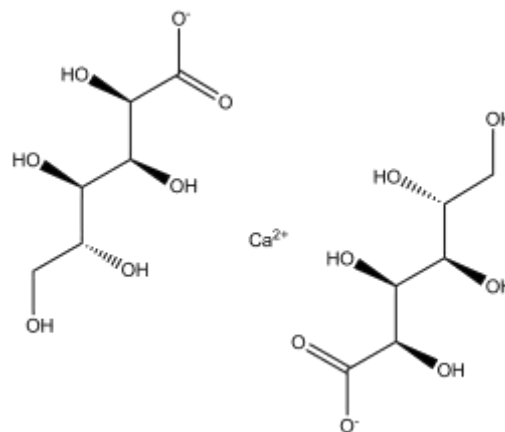
C231

Calcium Gluconate

Synonym: D-Gluconic Acid, Calcium Salt
Monohydrate
CAS: 299-28-5
Formula: $C_{12}H_{22}O_{14}Ca \cdot H_2O$
MW: 448.39 g/mol

Properties:

Form: Powder
Appearance: White to Off-White Granules
Application: Plant Mesonutrient
Solubility: Water
Typical Working Concentration: Varies by application, should be determined by the end user.
Storage Temp: Room Temperature
Other Notes: Plant Tissue Culture Tested



Application Notes:

Calcium gluconate is an alternative calcium source for plant tissue culture as opposed to calcium chloride and calcium nitrate. When combined with MES and lower growing temperatures (<25°C) it has been shown to reduce shoot-tip necrosis in *Populus* sp. (De Block 1990).

Please Note: While PhytoTechnology Laboratories™ tests each lot of this product with two or more plant cell/ tissue culture lines, it is the sole responsibility of the purchaser to determine the appropriateness of this product for the specific plants that are being cultured and applications that are being used.

References:

De Block M (1990) Factors Influencing the Tissue Culture and the *Agrobacterium tumefaciens*-Mediated Transformation of Hybrid Aspen and Poplar Clones. *Plant Physiol.* Vol. 93(3):1110-1116
Merck 13, 1671

PhytoTechnology Laboratories, LLC™

P.O. Box 12205 • Shawnee Mission, KS • 66282-2205

Phone: 1-913-341-5343 or 1-888-749-8682 (U.S. Only) Fax: 1-913-341-5442 or 1-888-449-8682 (U.S. Only)

Web Site: www.phytotechlab.com

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