

CERTIFICATE OF ANALYSIS

Product Description (+/-) VERAPAMIL HYDROCHLORIDE
Product Number V847
Lot Number 03A84703
Storage Temperature Room Temperature
Molecular Weight 491.1
Formula $C_{27}H_{38}N_2O_4 \cdot HCl$
CAS Number 152-11-4

Physiochemical Specifications:

TEST	SPECIFICATION	RESULTS
Solubility	Soluble in Water @ 10 mg/mL	Passes
pH	Under Development	4.7
Physical Appearance Color* Texture	PM-1 to PM-4 Fine Powder	PM-4 White Fine Powder
Solution Appearance Clarity Color	Clear Colorless	Clear Colorless
Average Time to Dissolve	For Information Only (Approx. 1 min)	1 min
Insolubles	None	Passes
FTIR	Conforms to Structure	Passes
Purity	99.0%	99.8%
Heavy Metals	For Information Only	<10 ppm

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

Biological Testing:

Test Concentration: 50 mg/L

TEST SPECIFICATION	PLANT CELL LINE	RESULTS
This product is tested with two or more plant cell lines to ensure there are no cytotoxic/phytotoxic effects with no morphological aberrations to plants	Tobacco callus	Passes
	Syngonium	Passes

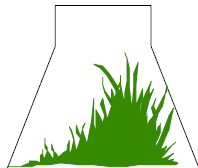
The material described in this certificate is synthetic. No animal- or plant-derived components were used in the manufacture of this product.

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: August 2020



Gary Seckinger, Ph.D.



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