

CERTIFICATE OF ANALYSIS

Product Description PUTRESCINE DIHYDROCHLORIDE
1,4-BUTANEDIAMINE DIHYDROCHLORIDE
Product Number P733
Lot Number SSS0733007
Storage Temperature Room Temperature
Molecular Weight 161.1
Formula $C_4H_{12}N_2 \cdot 2HCl$
CAS Number 333-93-7

Physiochemical Specifications:

TEST	SPECIFICATION	RESULTS
Solubility	Soluble in Water @ 10 mg/mL	Passes
pH	Under Development	5.2
Physical Appearance Color* Texture	PM-1 to PM-4 Fine to Coarse Powder, may have some larger clumps	PM-1 Off- White Coarse Powder
Solution Appearance Clarity Color	Clear Colorless	Clear Colorless
Average Time to Dissolve	For Information Only (Approx. 5 min)	5 min
Insolubles	None	Passes
FTIR	Conforms to Structure	Passes
Purity	Minimum 98.0%	100.0%

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

Biological Testing:

Test Concentration: 100.0 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	Ajuga	Passes
	Begonia	Passes

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

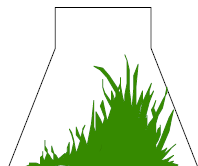
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Date of Release: 14-July-2017

Recommended Shelf Life Date: July-2025



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