CERTIFICATE OF ANALYSIS

Product Description	L-Proline
Product Number	P698
Lot Number	15H0698020
Storage Temperature	Room Temperature
Molecular Weight	115.13
Formula	$C_5H_9NO_2$
CAS Number	147-85-3

Physiochemical Specifications:

TEST	SPECIFICATION	RESULTS
Solubility	Soluble in Water @ 10 mg/mL	Passes
рН	Under Development	6.8
Physical Appearance		
Color*	PM-1 to PM-4	PM-1 Off-White
Texture	Fine to Coarse Crystalline Powder	Fine Powder
Solution Appearance		
Clarity	Clear	Clear
Color	Colorless	Colorless
Average Time to Dissolve	Within 1 min	< 1 min
Insolubles	None	Passes
FTIR	Conforms to Structure	Passes
Purity	Minimum 98.5%	99.40%
Moisture (LOD)	For Information Only	0.04%

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

Biological Testing:

Test Concentration: 100 mg/L

TEST SPECIFICATION	PLANT CELL LINE	RESULTS
Supports and/or facilitates plant growth and/or shoot proliferation in two or	Sugar Cane	Passes
more plant tissue cultures with no morphological aberrations to plants	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.

*Phyto*Technology 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. *Phyto*Technology 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: September 2023

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