

CERTIFICATE OF ANALYSIS

Product Description L-ORNITHINE HYDROCHLORIDE
Product Number O626
Lot Number 14L0626002
Storage Temperature Room Temperature
Molecular Weight 168.65
Formula $C_5H_{12}N_2O_2 \cdot HCl$
CAS Number 3184-13-2

Physiochemical Specifications:

| TEST | SPECIFICATION | RESULTS |
|--|-----------------------------|---------------------------|
| Solubility | Soluble in Water @ 10 mg/mL | Passes |
| pH | Under Development | 5.3 |
| 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 | Within 1 min | Passes |
| Insolubles | None | Passes |
| Purity | Minimum 98.0% | 99.8% |

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

Biological Testing:

Test Concentration: 50.0 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 | Potato | Passes |
| | Cape Primrose | 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: December 2022



Gary Seckinger, Ph.D.



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