

CERTIFICATE OF ANALYSIS

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|---------------------|---|
| Product Description | L-PROLINE |
| Product Number | P698 |
| Lot Number | 10A0698012 |
| Storage Temperature | Room Temperature |
| Molecular Weight | 115.13 |
| Formula | C ₅ H ₉ NO ₂ |
| CAS Number | 147-85-3 |

Physiochemical Specifications:

| TEST | SPECIFICATION | RESULTS |
|--|---|----------------------------|
| Solubility | Soluble in Water @ 10 mg/mL | Passes |
| pH | Under Development | 5.26 |
| Physical Appearance Color* Texture | RM-1 to RM-3 or RM-31 Fine to Crystalline Powder that may have needle-like crystals | RM-31 White Fine Powder |
| Solution Appearance Clarity Color | Clear Colorless | Clear Colorless |
| Average Time to Dissolve | Within 1 min | Passes |
| Insolubles | None | Passes |
| Purity | Minimum 98.5% | 99.6% |
| Moisture (LOD) | For Information Only | 0.16% |

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

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 more plant tissue cultures with no morphological aberrations to plants | Tobacco callus | Passes |
| | Hosta | 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: January 2018



Gary Seckinger, Ph.D.



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Mailing Address: P.O. Box 12205, Shawnee Mission, KS 66282-2205
Phone: 1-888-749-8682 (1-913-341-5343 *Outside the USA & Canada*)
Fax: 1-888-449-8682 (1-913-341-5442 *Outside the USA & Canada*)
Visit our Web Site at <http://www.phytotechlab.com>

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