

CERTIFICATE OF ANALYSIS

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| Product Description | L-ASCORBIC ACID 3-OXO-L-GULOFURANOLACTONE; VITAMIN C |
| Product Number | A106 |
| Lot Number | HAE0106018 |
| Storage Temperature | Room Temperature |
| Molecular Weight | 176.13 |
| Formula | C ₆ H ₈ O ₆ |
| CAS Number | 50-81-7 |

Physiochemical Specifications:

| TEST | SPECIFICATION | RESULTS |
|------------------------------------------|------------------------------------|----------------------------------|
| Solubility | Soluble in Water @ 10 mg/mL | Passes |
| pH | Under Development | 2.7 |
| Physical Appearance Color* Texture | PM-1 to PM-4 Crystalline Powder | PM-3 White Crystalline Powder |
| Solution Appearance Clarity Color | Clear Colorless | Clear Colorless |
| Average Time to Dissolve | Within 1 min | Passes |
| Insolubles | None | Passes |
| FTIR | Conforms to Structure | Passes |
| Purity | Minimum 99.0% | 99.76% |

* 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 |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|---------|
| This product is commonly used as an anti-oxidant. It is tested with two or more plant cell lines to ensure there are no phytotoxic impurities that would result in morphological aberrations to plants. | Xanthi Tobacco Callus | Passes |
| | African Violet | Passes |

This material is derived from microbial fermentation and highly purified and considered semi-synthetic. No animal- or plant-derived components were used in the manufacture of this product.

PhytoTech Labs Inc. provides the above information intended to be used only as a guide to the appropriate handling of this material by a properly trained person. PhytoTech Labs Inc. 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.

Date of Release: 15-July-2024

Recommended Shelf-Life Date: July 2032



David Hart
Technical Director