

CERTIFICATE OF ANALYSIS

Product Description CARBENICILLIN, DISODIUM SALT
 α -CARBOXYBENZYL PENICILLIN, DISODIUM SALT
Product Number C346
Lot Number HEA0346100
Storage Temperature 2-8°C
Molecular Weight 422.36 g/mol
Formula $C_{17}H_{16}N_2O_6SNa_2$
CAS Number 4800-94-6

Physiochemical Specifications:

| TEST | SPECIFICATION | RESULTS |
|--|--|-------------------------------------|
| Solubility | Soluble in Water @ 10 mg/mL | Passes |
| pH | 5.5 – 7.0 | 6.2 |
| Physical Appearance Color* Texture | 2022-70 to 2027-70, 2143-70 to 2151-70 Fine Powder | 2025-70 Light Yellow Fine powder |
| Solution Appearance Clarity Color | Clear Colorless | Clear Colorless |
| Average Time to Dissolve | For Information Only (Approx. 5 min) | Passes |
| Insolubles | None | Passes |
| FTIR | Conform to Structure | Passes |
| Water | For Information Only | 5.4% |
| Purity | Minimum 85.0% | 94.0% |

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

Biological Testing:

Test Concentration: 50 mg/L

| TEST SPECIFICATION | PLANT CELL LINE | RESULTS |
|---|-----------------|---------|
| This product does not typically promote growth; tissue necrosis or death is possible. This product is tested with two or more clean plant cell lines with no bioburden added to the medium. | African Violet | Passes |
| | Achimenes | 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: 14-October-2020

Recommended Shelf Life Date: October 2023



David S. Hart
Technical Director

PhytoTech Labs Inc.
14610 W 106TH St. Lenexa, KS 66215
Phone: 1-888-749-8682 or 1-913-341-5343
Fax: 1-888-449-8682 or 1-913-341-5442
Phytotechlab.com