CERTIFICATE OF ANALYSIS

Product Description CARBENICILLIN, DISODIUM SALT

α-CARBOXYBENZYLPENICILLIN, DISODIUM SALT

Product Number C346

Lot Number HKW0346107

Storage Temperature 2-8°C

 $\begin{array}{ll} \text{Molecular Weight} & 422.36 \text{ g/mol} \\ \text{Formula} & C_{17}H_{16}N_2O_6SNa_2 \end{array}$

CAS Number 4800-94-6

Physiochemical Specifications:

TEST	SPECIFICATION	RESULTS
Solubility	Soluble in Water @ 10 mg/mL	Passes
pН	5.5 - 7.0	6.8
Physical Appearance		
Color*	2022-70 to 2027-70,	
	2143-70 to 2151-70	2144-70 White
Texture	Fine Powder	Fine powder
Solution Appearance		
Clarity	Clear	Clear
Color	Colorless	Colorless
	For Information Only	
Average Time to Dissolve	(Approx. 5 min)	Passes
Insolubles	None	Passes
FTIR	Conform to Structure	Passes
Purity	Minimum 85.0%	97.9%
Potency	≥770 µg/mg	846 μg/mg

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

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	Achimenes	Passes
is tested with two or more clean plant cell lines with no bioburden added to the medium.	Xanthi Tobacco Callus	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: 02-June-2023

Recommended Shelf-Life Date: June 2028

David 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