CERTIFICATE OF ANALYSIS

Product Description CARBENICILLIN, DISODIUM SALT

α-CARBOXYBENZYLPENICILLIN, DISODIUM SALT

Product Number C346

Lot Number STS0346090

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
pH	5.5 - 7.0	6.5
Physical Appearance		
Color*	2022-70 to 2027-70,	2022-70 Light Yellow
	2143-70 to 2151-70	_
Texture	Fine Powder	Fine powder
Solution Appearance		
Clarity	Clear	Clear
Color	Colorless	Colorless
	For Information Only	
Average Time to Dissolve	(Approx. 5 min)	5 min
Insolubles	None	Passes
FTIR	Conform to Structure	Passes
Water	For Information Only	2.3%
Purity	Minimum 85.0%	92.5%

^{*} 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	Begonia	Passes
is tested with two or more clean plant cell lines with no bioburden added to the medium.	Echinacea	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.

Phyto Technology 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. Phyto Technology 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.

Date of Release: 11-Aug-2017

Recommended Shelf Life Date: August 2020

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