CERTIFICATE OF ANALYSIS

Product Description Tetracycline Hydrochloride

 $(4S-(4a,4a\alpha,5a\alpha,6\beta,12a\alpha)]-4-(Dimethylamino)-1,4,4a,5,5a,6,11,12a-OCTAHYDRO-3,6,10,12,12a-PENTAHYDROXY-6-METHYL-1,11-DIOXO-2-DIMETH$

NAPTHACENECARBOXAMIDE HYDROCHLORIDE

Product Number T859

Lot Number AKK0859007

Storage Temperature -20°C

 $\begin{array}{ll} \text{Molecular Weight} & 480.94 \text{ g/mol} \\ \text{Formula} & C_{22}H_{24}N_2O_8 \bullet HC1 \end{array}$

CAS Number 64-75-5

Physiochemical Specifications:

TEST	SPECIFICATION	RESULTS
Solubility	Soluble in Water @ 10 mg/mL	Passes
pН	Under Development	2.5
Physical Appearance		
Color*	2022-10 to 2022-50 or	2022-10 Yellow
	2023-10 to 2023-50	
Texture	Fine to Crystalline Powder	Fine Powder
Solution Appearance		
Clarity	Clear	Clear
Color	Light Yellow to Yellow-Green	Yellow-green
	For Information Only	
Average Time to Dissolve	(Approx. 5 min)	Passes
Insolubles	None	Passes
Potency	Minimum 900 μg/mg	966 μg/mg
Purity	Minimum 95.0%	99.62%
Loss on Drying	For Information Only	0.31%
FTIR	Conforms to Structure	Passes

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

The material described in this certificate is 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: 4-June-2019

Recommended Shelf Life Date: December-2021

David S. Hart

Technical Services Manager