

100 Majestic Way, Bangor, PA 18013 / www.biospectra.us

Effective Date:	14-Jul-2020	14-Jul-2023	: Date of Next Review
Prepared By:	Amy Hosein	20-001826 v.1.0	: Supersedes
QA/QC Approval:	Carissa McCollian	Amy Yencho	: Management Approval
Reason for Revision:	See Revision History in ensur.		

## CERTIFICATE OF ANALYSIS GUANIDINE THIOCYANATE BIO ULTRA GRADE / GT5221 – K025 LOT: GT5221-008-1020

NH<sub>2</sub>C(NH)NH<sub>2</sub>·HSCN \* F.W. 118.16 g mol. \* CAS#: 593-84-0 Manufacturing/Packaging Date: 10/28/20 Retest Date: 10/31/22 Packaging Site: 100 Majestic Way, Bangor PA, 18013

ANALYSIS		SPECIFICATION	TEST RESULT
Appearance and Color		White / Crystals	White / Crystals
Assay, Dried Basis		$\geq 99.0\%$	100.1%
Enzymes	DNase	None Detected	None Detected
	RNase	None Detected	None Detected
Heavy Metals (as Lead)		≤ 5 ppm	< 5 ppm
Identification (IR)		Conforms to Structure	Conforms to Structure
Solubility (Colour)		Colorless	Colorless
Solubility (Turbidity) 100mg/mL H <sub>2</sub> O		Clear	Clear
Trace Metals	Barium (Ba)	≤ 0.0005%	≤0.0005%
	Iron (Fe)	≤ 0.0005%	≤0.0005%
	Potassium (K)	≤ 0.005%	≤0.005%
	Sodium (Na)	≤0.5%	≤0.5%

## TEST METHOD REFERENCE: 16-000043

<u>INTENDED USE:</u> Material represented by this Certificate of Analysis is suitable for use as a process chemical. The material represented by this Certificate of Analysis is not suitable to be used as an Excipient, Active Pharmaceutical Ingredient, Drug, Drug Product or Household Item.

Prepared by: <u>Card Ju</u>	Date: 11/03/20	Job Title: QA Docement specialist
Reviewed by:	Date: 11/3/20	Job Title: DA Supervisor