

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 Yenko	: Management Approval
Reason for Revision:	See Revision History in ensur.		

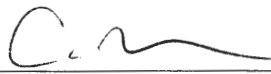
CERTIFICATE OF ANALYSIS
GUANIDINE THIOCYANATE
BIO ULTRA GRADE / GT5221 – K010
LOT: GT5221-004-0820

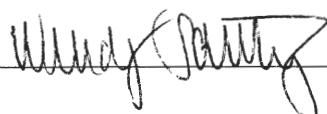
NH₂C(NH)NH₂·HSCN * F.W. 118.16 g/mol. * CAS#: 593-84-0
 Manufacturing/Packaging Date: 8/4/20 Retest Date: 8/31/22
 Packaging Site: 100 Majestic Way, Bangor PA, 18013

ANALYSIS	SPECIFICATION	TEST RESULT
Appearance and Color	White / Crystals	White / Crystals
Assay, Dried Basis	≥ 99.0%	100.2%
Enzymes	DNase	None Detected
	RNase	None Detected
Heavy Metals (as Lead)	≤ 5 ppm	<2 ppm
Identification (IR)	Conforms to Structure	Conforms to Structure
Solubility (Colour)	Colorless	Colorless
Solubility (Turbidity) 100mg/mL H ₂ O	Clear	Clear
Trace Metals	Barium (Ba)	≤ 0.0005%
	Iron (Fe)	≤ 0.0005%
	Potassium (K)	≤ 0.005%
	Sodium (Na)	≤ 0.5%

TEST METHOD REFERENCE: 16-000043

INTENDED USE: 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:  Date: 8/11/20 Job Title: QA Supervisor

Reviewed by:  Date: 8/11/20 Job Title: QA Manager