

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

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|----------------------|--------------------------------|-----------------|-----------------------|
| Effective Date: | 13-Aug-2021 | 13-Aug-2024 | : Date of Next Review |
| Prepared By: | Jared L Lobb | 20-001826 v.2.0 | : Supersedes |
| QA/QC Approval: | Jaron Hughes | Wendy Santay | : Management Approval |
| Reason for Revision: | See Revision History in ensur. | | |

CERTIFICATE OF ANALYSIS
GUANIDINE THIOCYANATE
BIO ULTRA GRADE / NEW CODE GTHI-5221-05
(HISTORICAL CODE GT5221-K005)
LOT: GTHI-0122-00001

$\text{NH}_2\text{C}(\text{NH})\text{NH}_2\text{-HSCN}$ ^ F.W. 118.16 g/mol. ^ CAS#: 593-84-0
 Manufacturing/Packaging Date: 2/14/22 Retest Date: 2/29/24
 Packaging Site: 100 Majestic Way, Bangor PA, 18013

| ANALYSIS | | SPECIFICATION | TEST RESULT |
|--|---------------|-----------------------|-----------------------|
| Appearance and Color | | White / Crystals | White / Crystals |
| Assay, Dried Basis | | ≥ 99.0% | 99.9% |
| 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 ₂ 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

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: Jaron Hughes Date: 2/15/22 Job Title: QA Specialist

Reviewed by: C. L. Date: 2/15/22 Job Title: QA Manager