

GUANIDINE THIOCYANATE

GMP, Excipient

CAS #: 593-84-0

 Formula: $\text{NH}_2\text{C}(\text{NH})\text{NH}_2 \cdot \text{HSCN}$

F.W.: 118.16 g/mol

GTHI-3220
Bio EXCIPIENT GRADE

| ANALYSIS | SPECIFICATIONS | | |
|----------------------|----------------|--------------------------------|--|
| Absorbance (1.7M) | 280nm | < = 0.300 a.u. | |
| | 300nm | < = 0.050 a.u. | |
| | 340nm | < = 0.030 a.u. | |
| Appearance and Color | | White Crystals | |
| Assay, Dried Basis | | > = 99.5% | |
| Enzymes | DNase | None Detected | |
| | RNase | None Detected | |
| | Protease | None Detected | |
| Identification, IR | | Conforms to Reference Standard | |
| Loss on Drying | | < = 0.5% | |
| Melting Range | | 115 – 121°C | |
| pH (5%) | | 5.0 – 7.0 | |
| Solubility (35%) | | Passes Test | |
| Trace Metals | Arsenic (As) | < = 5 ppm | |
| | Copper (Cu) | < = 5 ppm | |
| | Iron (Fe) | < = 5 ppm | |
| | Lead (Pb) | < = 5 ppm | |

General Product Overview

Guanidine Thiocyanate is a chaotropic agent. As one of the strongest protein denaturants, it inactivates nucleases more efficiently than Guanidine Hydrochloride. Guanidine Thiocyanate is preferred for the purification of RNA because it dissociates the RNA into its nucleic acids and protein forms. Higher molarity solutions of Guanidine Thiocyanate irreversibly inactivate RNase. Guanidine Thiocyanate causes proteins to dissolve readily, thus disintegrating cellular structures.

Industry Application

Suitable for use as a cGMP chemical in pharmaceutical manufacturing processes and products.

Key Product Features

- The manufacturing of Guanidine Thiocyanate, GTHI-3220 is performed at BioSpectra's Bangor, PA facility.
- Appears as white crystals
- Manufactured in accordance with ICH Q7
- Manufactured in an enzyme free, hormone free and animal free environment
- Contains no known major food allergens (as defined by FDA and WHO)
- The final product and its raw materials are not derived from nor come into contact with animal parts, animal products, and/or animal byproducts or derivatives.
- Is not subject to genetic modification
- Synonyms: Guanidine Isothiocyanate

Storage and Shipping Conditions

Refer to SDS.

Standard Shelf-Life Policy

Unless otherwise noted on the Shelf-Life Statement and CoA, this product has a 2-year retest date supported by a 3-year ICH Q1 Stability Study (if one is completed).

Package Sizes

10kg, 25kg and 50kg pails

[Click here to view SDS, CoAs and other supporting regulatory documents on our website.](#)

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