

# 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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