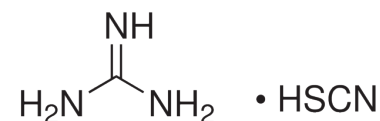


## Guanidine Thiocyanate

TECHNICAL PRODUCT SHEET

INTENDED FOR USE IN COMMERCIAL MANUFACTURING, DIAGNOSTIC AND LABORATORY APPLICATIONS

Guanidine Thiocyanate is a chaotropic agent. As one of the strongest protein denaturants, it inactivates nucleases more than twice as fast as 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.



**CAS #:** 593-84-0

**Molecular Formula:** C<sub>2</sub>H<sub>6</sub>N<sub>4</sub>S

**Solubility in Water (g/L):** 1,600

**F.W.:** 118.16 g/mol

**pH @ 20°C:** 5.0 - 7.0

### ULTRA DIAGNOSTIC GRADE | GT5221

C<sub>2</sub>H<sub>6</sub>N<sub>4</sub>S · F.W. 118.16 · CAS#: 593-84-0

These are general specifications. BioSpectra will customize our products to meet your quality based requirements.

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

#### General Product Description:

- Guanidine Thiocyanate is a White/Colorless Crystalline or Powder product.
- Molecular Formula: C<sub>2</sub>H<sub>6</sub>N<sub>4</sub>S
- Molecular Weight: 118.16 g/mol.
- CAS Number: 593-84-0.
- Synonyms: Guanidine Isothiocyanate.



## Key Compliance Attributes of Bio Ultra Grade

Suitable for Research and Diagnostic Application

C of A Available for Each Lot

Management of Change

Trace Metals Analyzed

Stability Testing Program

BioSpectra Supply Chain Audit Trail

Product Origin Statement

Customer Quality Audits

Customized Additional Specifications

Enzyme Tested

## Compliance:

Material represented by this grade is suitable to be used only as the following: Quality System Manufactured Process Chemical for use in further manufacturing or as a reagent chemical for commercial manufacturing, diagnostic and laboratory research. The material represented by this grade is not suitable to be used as an Excipient, Active Pharmaceutical Ingredient, Drug, Drug Product or household item.

## Expiration/Retest Date:

Two years from date of manufacture, testing and packaging

## Storage and Shipping Conditions:

Ship and Store in ambient temperature.

## Package Sizes:

10kg, 25kg and 50kg pails.

