

# **GUANIDINE HCL**

## **Diagnostic / Reagent Grade**

### TECHNICAL PRODUCT SHEET

#### INTENDED FOR USE IN DIAGOSTIC AND LABORATORY APPLICATIONS

Guanidine Hydrochloride is a strong protein denaturant that functions as a chaotropic agent. As a denaturant, it acts to unfold proteins and turn them into their original polypeptide chains. As a chaotropic agent, it breaks down the structure of proteins. Guanidine Hydrochloride is commonly used in the purification of RNA by dissociating the RNA into its nucleic acids and protein forms. At higher concentrations, Guanidine Hydrochloride decreases enzyme activity. It is also used to increase the solubility of hydrophobic molecules.

NH NH<sub>2</sub>  $H_2N^{\prime}$ • HCI

CAS #: 50-01-1 Molecular Formula: CH<sub>5</sub>N<sub>3</sub> • HCl Solubility in Water (g/L): 800 F.W.: 95.53 g/mol pH @ 20°C: 4.5 - 6.0

### BIO ULTRA GRADE / Product Code: GHCL-5220 | Previously: GH5220

NH<sub>2</sub>C(NH)<sub>2</sub>HCI • F.W. 95.53 g/mol. • CAS# 50-01-1

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

ANALYSIS		SPECIFICATIONS
	260 nm	0.0500 a.u. maximum
Absorbance	275 nm	0.0500 a.u. maximum
	230 nm	0.3000 a.u. maximum
Appearance and Color		White / Crystals
Assay		99.0% minimum
Identification (IR)		Passes Test
Melting Range		184-188°C
pH (6M)		4.5-6.0
Residue on Ignition		0.05% maximum
Solubility (6M)		Passes Test

### **General Product Description:**

- Guanidine HCl is a White Crystalline product.
- Molecular Formula: NH<sub>2</sub>C(NH)NH<sub>2</sub>HCl
- Molecular Weight: 95.53 g/mol.
- CAS Number: 50-01-1.
- Synonyms: Guanidine Monohydrochloride, Guanidinium Chloride, Guanidinium Hydrochloride.



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### Quality Assurance / Regulatory Support / Quality Control





### **Intended Use Statement:**

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 for laboratory and 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:**

BioSpectra does not assign expiration or retest dates for Bio Ultra Grade materials.

### **Storage and Shipping Conditions:**

Ship and Store in ambient temperature.

### **Package Sizes:**

10kg, 25 kg and 50 kg pails.



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