

**Product:** Guanidine Hydrochloride, UltraBiopure  
**Catalog Number:** G5705  
  
**Formula:**  $\text{CH}_5\text{N}_3 \cdot \text{HCl}$   
**Formula Weight:** 95.53  
**CAS Number:** 50-01-1

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|----------------------|
| <b>SPECIFICATION</b> |
|----------------------|

| Test   | Specification                      |
|--|------------------------------------|
| Appearance .....                                   | White crystals .....               |
| Assay (by titration) .....                         | NLT 99.5% .....                    |
| Loss on Drying (3h at 110°C) .....                 | NMT 1.0% .....                     |
| Solubility (6M solution in water).....             | Clear, complete and colorless..... |
| Identification (by IR) .....                       | Conforms to structure.....         |
| Melting Point.....                                 | 184°C – 188°C .....                |
| UV Absorbance (at 260nm).....                      | NMT 0.05.....                      |
| UV Absorbance (at 240nm).....                      | NMT 0.05.....                      |
| UV Absorbance (at 230nm).....                      | NMT 0.15.....                      |
| pH (1:10 dilution) .....                           | 4.5 to 6.5 .....                   |
| <br>   |                                    |
| Residue on Ignition.....                           | NMT 0.05% .....                    |
| Copper (Cu).....                                   | NMT 1 ppm.....                     |
| Heavy Metals (as Pb) .....                         | NMT 0.5 ppm.....                   |
| Iron (Fe).....                                     | NMT 1 ppm.....                     |
| Zinc (Zn) .....                                    | NMT 1 ppm.....                     |
| <br>   |                                    |
| Endotoxin (0.2% solution in H <sub>2</sub> O)..... | NMT 0.1 EU/mL.....                 |
| RNase, DNase, Protease .....                       | None detected .....                |

**Additional Information**

Country of Origin .....USA  
 Material of Origin .....Synthetic  
 Production Method .....Chemical Synthesis  
 Manufacturing Date .....  
 Retest Date.....4 years from manufacturing date  
  
 Storage Conditions .....15°C to 30°C  
 Material is of non-animal, non-human origin