



Certificate of Analysis

Guanidine Hydrochloride 99.5%

Catalog Number: GH1001
Lot Number: 0427701
CAS Number: 50-01-1
Molecular Formula: $\text{CH}_5\text{N}_3\cdot\text{HCl}$
Molecular Weight: 95.53
Storage: 15°C to 30°C
Date of Manufacture: January 10, 2017
Retest Date: January 9, 2020

Test	Specification	Result
Appearance	White crystalline powder	Conforms
Assay (by titration)	≥ 99.5%	99.90%
Identification (by IR)	To meet requirements	Conforms
Melting point	185.0° to 188.0°C	185.8 to 187.2°C
pH (1:10 dilution in H ₂ O @25°C)	5.0 to 7.0	6.2
Solubility (6M solution in H ₂ O)	Clear and colorless	Conforms
Absorbance (6M solution in H ₂ O)		
230nm	≤ 0.14	0.07
240nm	≤ 0.05	0.01
260nm	≤ 0.03	0.04
Moisture (LOD)	≤ 1.0%	0.49%
Ash	≤ 0.05%	0.02%
Heavy Metals (Pb)	≤ 0.5%	0.01%
Copper (Cu)	≤ 1 ppm	< 1ppm
Iron (Fe)	≤ 1 ppm	0.4ppm
Zinc (Zn)	≤ 1 ppm	< 1ppm
DNase	None detected	Conforms
RNase	None detected	Conforms
Protease	None detected	Conforms

Approved by:

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Date: April 27, 2017