Glycine, U.S.P. Multi-Compendial

(aminoacetic acid)



Material No.: 0582-01 Batch No.: 0000169135 Manufactured Date: 2016/10/05

Retest Date: 2021/10/04

## Certificate of Analysis

Meets B.P. Chemical Specifications, Meets E.P. Chemical Specifications, Meets J.P. Chemical Specifications, Meets U.S.P Requirements, GMP Manufactured Product

Test	Specification	Result
USP – Identification	Passes Test	PT
USP – Loss on Drying at 105°C	<= 0.2 %	< 0.1
USP – Residue on Ignition	<= 0.1 %	< 0.1
USP – Chloride (Cl)	<= 0.007 %	< 0.007
USP – Sulfate (SO4)	<= 0.0065 %	< 0.0065
USP – Heavy Metals (as Pb)	<= 0.002 %	< 0.002
USP – Hydrolyzable Substances	Passes Test	PT
USP – Assay (C2H5NO2) (dried basis)	98.5 - 101.5 %	99.7
USP – Endotoxin Concentration (EU/g)	<= 2.5	0.1
EP/BP - Assay (C2H5NO2) (dried basis)	98.5 - 101.0 %	99.5
EP/BP - Identification A	Passes Test	PT
EP/BP - Appearance of Solution	Passes Test	PT
EP/BP – pH	5.9 - 6.4	6.2
EP/BP – Chloride (Cl)	<= 75 ppm	< 75
EP/BP – Heavy Metals (as Pb)	<= 10 ppm	< 10
EP/BP – Loss on Drying at 105°C	<= 0.5 %	< 0.1
EP/BP – Ash (sulfated)	<= 0.1 %	< 0.1
EP/ BP - Related substances: Glycine anhydride	<= 0.10 %	< 0.10
EP/ BP – Related substances: Diglycine	<= 0.10 %	< 0.10
EP/ BP – Related substances: Triglycine	<= 0.10 %	< 0.10
EP/ BP - Related substances: Unspecified impurities,	<= 0.10 %	< 0.10

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Test	Specification	Result
each		
EP/ BP - Related substances: Total impurities	<= 0.2 %	< 0.1
EP/BP - Ninhydrin Positive Substances - Each Impurity	<= 0.10	< 0.05
EP/BP-Ninhydrin-Positive Substances-Total Impurities	<= 1.0 %	< 0.1
EP/BP – Ammonium (NH4)	<= 0.02 %	< 0.02
P - Assay (C <sub>2</sub> H <sub>5</sub> NO <sub>2</sub> ) (dried basis)	98.5 - 101.0 %	99.7
P – Identification	Passes Test	PT
P – pH (1 in 20)	5.6 - 6.6	6.2
P – Clarity and Color of Solution	Passes Test	PT
P – Chloride (Cl)	<= 0.021 %	< 0.021
P – Sulfate (SO <sub>4</sub> )	<= 0.028 <b>%</b>	< 0.028
P – Ammonium (NH <sub>4</sub> )	<= 0.02 %	< 0.02
P – Heavy Metals (as Pb)	<= 20 ppm	< 20
P – Arsenic (As)	<= 2 ppm	< 2
P – Related Substances	Passes Test	PT
P – Loss on Drying at 105°C	<= 0.30 <b>%</b>	< 0.10
P – Residue on Ignition	<= 0.10 %	< 0.05

**Bulk Pharmaceutical Chemical** 

CAUTION: For Manufacturing, processing or repackaging

Only Class 2 Solvents (Methanol) are likely to be present. All are below Option 1 limits.

Country of Origin: US

Packaging Site: Paris Mfg Ctr & DC

Manufacturer: P0023001
Manufacturer source batch: BXP1849



Phillipsburg, NJ 9001:2008, 14001:2004, FSSC 22000
Paris, KY 9001:2008
Mexico City, Mexico 9001:2008
Deventer, The Netherlands 9001:2008, 14001:2004, 13485:2003
Gliwice, Poland 9001:2008, 13485:2012
Selangor, Malaysia 9001:2008
Dehradun, India, 9001:2008, 14001:2004, 13485:2003
Mumbai, India, 9001:2008
Panoli, India 9001:2008

Jamie Ethier
Vice President Global Quality