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

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.573.2600 Avantor Performance Materials, LLC.

3477 Corporate Parkway. Center Valley, PA 18034. U.S.A. Phone: 610.573.2600 . Fax: 610.573.2610

Test	Specification	Result
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P/ BP – Related substances: Total impurities	<= 0.2 %	< 0.1
P/BP – Ninhydrin Positive Substances – Each Impurity	<= 0.10	< 0.05
P/BP-Ninhydrin-Positive Substances-Total Impurities	<= 1.0 %	< 0.1
P/BP – Ammonium (NH4)	<= 0.02 %	< 0.02
P – Assay (C2H5NO2) (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	РТ
P – Chloride (Cl)	<= 0.021 %	< 0.021
P – Sulfate (SO4)	<= 0.028 %	< 0.028
P – Ammonium (NH₄)	<= 0.02 %	< 0.02
P – Heavy Metals (as Pb)	<= 20 ppm	< 20
P – Arsenic (As)	<= 2 ppm	< 2
P – Related Substances	Passes Test	РТ
P – Loss on Drying at 105°C	<= 0.30 %	< 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

James Techie

Jamie Ethier Vice President Global Quality

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