

Urea
 Ultrapure Bioreagent
 For Protein Solubilization and Denaturation
 For Molecular Biology Applications



Material No.: 4111-01
 Batch No.: 0000177860
 Manufactured Date: 2013/01/21
 Retest Date: 2018/01/20

Certificate of Analysis

Test	Specification	Result
Assay (NH ₂ CONH ₂)	>= 99.5 %	99.8
Appearance	Passes Test	PT
RNase Activity	Passes Test	PT
DNase Activity (None Detected)	Passes Test	PT
Protease Activity	Passes Test	PT
Absorbance of a 5M Solution – 260 nm	<= 0.050	< 0.010
Absorbance of a 5M Solution – 280 nm	<= 0.030	< 0.010
Biuret	<= 0.01	< 0.01
Cyanate (CNO)	None Detected	None Detected
ACS – Insoluble Matter	<= 0.005 %	< 0.001
Water (H ₂ O)(by Karl Fischer titrn)	<= 0.5 %	0.1
Conductivity of 8.5M Solution at 25°C, (µmho/cm)	<= 30	17
Chloride (Cl)	<= 1 ppm	< 1
Trace Impurities – Copper (Cu)	<= 1.000 ppm	< 1.000
Trace Impurities – Iron (Fe)	<= 1.000 ppm	< 1.000
Trace Impurities – Lead (Pb)	<= 1.000 ppm	< 1.000

For Laboratory, Research or Manufacturing Use

Country of Origin: US



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 Ethier
 Jamie Ethier
 Vice President Global Quality

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