



Version	00
Molecular weight	147.13
Quality Test / Release Date	08/30/2019
Molecular Formula	C5 H9 N O4
CAS No	56-86-0
Linear Formula	HO2CCH2CH2CH(NH2)CO2H
Flash Point (°C)	

Certificate of Analysis

This is to certify that units of the lot number below were tested and found to comply with the specifications of the grade listed. Certain data have been supplied by third parties. Acros Organics expressly disclaims all warranties, expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose. Products are for research use or further manufacturing. Not for direct administration to human or animals. It is the responsibility of the purchaser, formulator or those performing further manufacturing to determine suitability based upon the intended use of the end product. Products are tested to meet the analytical requirements of the noted grade. The following information is the actual analytical results obtained.

Catalog Number	15621	Quality Test / Release Date 08/30/2019
Lot Number	A0411666	
Description	L(+)-Glutamic acid, 99%	
Country of Origin	CHINA	
Declaration of Origin	plant	

BSE/TSE comment	
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Chemical Comment	
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Result name	Units	Specifications	Test Value
Appearance (Color)		White	White
Appearance (Form)		Powder	Powder
Infrared spectrum		Conforms	Conforms
Titration with NaOH		98.5 to 100.5 % (On dried substance)	100.0 % (On dried substance)
Loss on drying		=<0.5 % (105°C, 3 hrs)	0.025 % (105°C, 3 hrs)
Heavy metals (as Pb)		=<10 ppm	=<10 ppm
Sulfated ash		=<0.1 %	0.00092 %
Other amino acids		not detectable	not detectable
Specific optical rotation		+30.5° to +32.5° (20°C, 589 nm) (on dried substance)	+31.9° (20°C, 589 nm) (on dried substance)
Specific optical rotation			
Chloride (Cl)		=<200 ppm	=<200 ppm
Iron (Fe)		=<30 ppm	=<10 ppm
Sulfate (SO4)		=<300 ppm	=<200 ppm
Ammonium (NH4)		=<200 ppm	=<200 ppm
Arsenic oxide (As2O3)		=<1 ppm	=<1 ppm

Result name	Units	Specifications	Test Value
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L. Van den Broek, QA Manager

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