



Version	00
Molecular weight	163.17
Quality Test / Release Date	09/11/2019
Molecular Formula	C <sub>6</sub> H <sub>13</sub> N O <sub>4</sub>
CAS No	150-25-4
Linear Formula	(HOCH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> NCH <sub>2</sub> CO <sub>2</sub> H
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.

<b>Catalog Number</b>	17265	<b>Quality Test / Release Date</b>	09/11/2019
<b>Lot Number</b>	A0412133		
<b>Description</b>	Bicine, 99+%, for analysis		
<b>Country of Origin</b>	CHINA		
<b>Declaration of Origin</b>	synthetic		

<b>BSE/TSE comment</b>	
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<b>Chemical Comment</b>	
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Result name	Units	Specifications	Test Value
Appearance (Color)		White	White
Appearance (Form)		Crystalline powder or needles	Needles
Infrared spectrum		Conforms	Conforms
Titration with HClO <sub>4</sub>		≥99.0 %	99.6 %
Water		≤1.0 % (K.F.)	0.9 % (K.F.)
Sulfated ash		≤0.1 %	≤0.1 %
pH		4.0 to 5.5 (10 % at 20°C)	5.1 (10 % at 20°C)
UV		(5 % in water)	(5 % in water)
UV		at 250 nm A: ≤0.05	at 250 nm A: 0.046
Chloride (Cl)		≤50 ppm	≤50 ppm
Sulfate (SO <sub>4</sub> )		≤50 ppm	≤50 ppm
Iron (Fe)		≤5 ppm	≤5 ppm
Heavy metals (as Pb)		≤5 ppm	≤5 ppm



A handwritten signature in black ink, appearing to read "L. Van den Broek".

L. Van den Broek, QA Manager

Issued: 09-12-2019

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