

## CERTIFICATE OF ANALYSIS

Product : **L-GLUTAMIC ACID**  
 Product number : G0707  
 Batch number : 016626  
 Manufacturing date : 02-02-2021  
 Date of expiry : 31-01-2026

Packaging and storage : protected from light

	<b>SPECIFICATION</b>	<b>RESULT</b>	<b>UNITS</b>	<b>REMARKS</b>
Appearance	white or almost white, crystalline powder or colourless crystals	complies		
Identification	conform	complies		
Appearance of solution	clear and colourless	complies		
Appearance of solution	≥ 98.0	complies	%	transmittance
Specific rotation	+31.5 – +32.4	+32.0	°	
Chloride	≤ 0.020	complies	%	
Ammonium	≤ 0.02	complies	%	
Sulfate	≤ 0.020	complies	%	
Iron	≤ 10	complies	ppm	
Heavy metals	≤ 10	complies	ppm	
Arsenic	≤ 1	complies	ppm	
Related substances	conform	complies		TLC
Loss on drying	≤ 0.10	0.1	%	
Sulphated ash	≤ 0.10	0.0	%	
Assay	99.0 – 100.5	100.2	%	
pH	3.0 – 3.5	3.3		

This certificate of analysis is conform the results of the manufacturer.

Conclusion: approved

Released by:

drs. M. van Wissen, pharmacist  
 Department of Quality Control Duchefa B.V.

Date: 29-11-2021

The buyer is responsible to test each batch to ensure the product is suitable for their specific purpose.