

## **CERTIFICATE OF ANALYSIS**

Product : L-PROLINE

Product number : P0717
Batch number : 011643
Date of production : 05-03-2015
Date of analysis : 05-05-2015
Date of expiry : 31-03-2018

Packaging and storage : store in a well-closed container at room temperature

	SPECIFICATION	RESULT	UNITS	REMARKS
Appearance	white crystalline powder or colourless crystals	complies		
Solubility	soluble in water	complies		
Identification:				
- A (specific optical rotation)	conform	complies		
- B (IR-spectrum)	conform	complies		
- C (TLC)	conform	complies		
Appearance of solution	clear and colourless	complies		
Specific optical rotation	-84.086.0	-84.9	0	
Ninhydrin positive substances	≤ 0.5	complies	%	
Chloride	≤ 200	< 200	ppm	
Sulfate	≤ 300	< 300	ppm	
Ammonium	≤ 200	< 200	ppm	
Iron	≤ 10	< 10	ppm	
Heavy metals	≤ 10	< 10	ppm	as Pb
Loss on drying	≤ 0.5	0.1	%	
Sulfated ash	≤ 0.1	0.05	%	
Assay	98.5 - 101.0	100.0	%	dried substance

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: 11-11-2015

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

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